Violence Against Nurses

An Assessment of the Causes and Impacts of Violence in Nursing Education and Practice

The 112th Meeting of the

NATIONAL ADVISORY COUNCIL ON NURSE EDUCATION AND PRACTICE (NACNEP)

FIFTH REPORT to the
Secretary of Health and Human Services and the Congress

Meeting held April 2005

NATIONAL ADVISORY COUNCIL ON NURSE EDUCATION AND PRACTICE

Fifth Annual Report

Violence Against Nurses

The National Advisory Council on Nurse Education and Practice (NACNEP) advises the Secretary of the U.S. Department of Health and Human Services (DHHS) and the U.S. Congress on policy issues related to programs authorized by Title VIII of the U.S. Public Health Service Act and administered by the Health Resources and Services Administration (HRSA), Bureau of Health Professions (BHPr), Division of Nursing (DN), including nurse workforce supply, education, and practice improvement.

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Charter of the National Advisory Council on Nurse Education and Practice

Purpose

The Secretary and, by delegation, the Administrator of the Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services, are charged under Title VIII of the Public Health Service Act, as amended, with responsibility for a wide range of activities in support of nursing education and practice, which include: enhancement of the composition of the nursing workforce; improvement of the distribution and utilization of nurses to meet the health needs of the Nation; expansion of the knowledge, skills, and capabilities of nurses to enhance the quality of nursing practice; development and dissemination of improved models of organization; financing and delivery of nursing services; and promotion of interdisciplinary approaches to the delivery of health services, particularly in the context of public health and primary care.

Authority

42 USC 297t; section 845 of the Public Health Service Act, as amended. The National Advisory Council on Nurse Education and Practice (NACNEP) is governed by provisions of Public Law 92-463 which sets forth standards for the formation and use of advisory committees.

Function

The Advisory Council advises and makes recommendations to the Secretary and Congress on policy matters arising in the administration of Title VIII, including the range of issues relating to the nurse workforce, education, and practice improvement. The Advisory Council may make specific recommendations to the Secretary and Congress regarding programs administered by the Division of Nursing, particularly within the context of the enabling legislation and the Division's mission and strategic directions, as a means of enhancing the health of the public through the development of the nursing workforce.

Additionally, the Advisory Council provides advice to the Secretary and Congress in preparation of general regulations and with respect to policy matters arising in the administration of this title, including the range of issues relating to nurse supply, education, and practice improvement.

Structure

The Advisory Council shall consist of the Secretary or delegate who shall be an ex officio member and shall serve as the Chairperson and not fewer than twenty-one (21), nor more than twenty-three (23) members selected by the Secretary. Two of the appointed members shall be selected from full-time students representing various levels of education in schools of nursing; two shall be selected from the general public; two shall be selected from practicing professional nurses; and nine shall be selected from among the leading authorities in the various fields of nursing, higher, secondary education, and associate degree schools of nursing and from representatives of advanced education nursing groups (such as nurse practitioners, nurse midwives, and nurse anesthetists), hospitals and other institutions and organizations which provide nursing services. The Secretary shall ensure a fair balance between the nursing professions, with a broad geographic representation of members, a balance between urban and rural members, and an adequate representation of minorities. The majority of members shall be nurses.

The Secretary shall appoint members to serve for overlapping four-year terms. Members will be appointed based on their competence, interest, and knowledge of the mission of the profession involved. Members appointed to fill vacancies occurring prior to the expiration of the term for which their predecessors were appointed shall be appointed only for the remainder of such terms. Members may serve after the expiration of their term until their successor has taken office. A student member may continue to serve the remainder of a four-year term following completion of a nurse education program.

Subcommittees composed of members of the parent Advisory Council shall be established to perform specific functions within the Advisory Council's jurisdiction. The Department Committee Management Officer will be notified upon establishment of each of the subcommittees and will be provided information on its name, membership, function, and established frequency of meetings.

Management and support services shall be provided by the Division of Nursing, Bureau of Health Professions, Health Resources and Services Administration.

Meetings

Meetings shall be held at least two times a year at the call of the Chair, who shall also approve the agenda. Meetings shall be held jointly with related entities established under this title where appropriate, including the Council on Graduate Medical Education; Advisory Committee on Interdisciplinary, Community-Based Linkages; and the Advisory Committee on Training in Primary Care Medicine and Dentistry.

Not later than 14 days prior to the convening of a meeting, the Advisory Council shall prepare and make available an agenda of the matters to be considered at such meeting. At any such meeting, the Advisory Council shall distribute materials with respect to the issues to be addressed at the meeting. Not later than 30 days after the adjournment of this meeting, the Advisory Council shall prepare and make available to the public a summary of the meeting and any actions taken by the Advisory Council based upon the meeting.

Meetings shall be open to the public except as determined otherwise by the Secretary or other official to whom the authority has been delegated. Notice of meetings shall be given to the public. Meetings shall be conducted and records of the proceedings kept as required by applicable laws and departmental regulations.

Compensation

Members who are not full-time Federal employees shall be compensated at a rate equal to the daily equivalent of the annual rate of basic pay prescribed for Level IV of the Executive Schedule under section 5315 of title 5, United States Code, for each day (including travel time) during which such member is engaged in the performance of the duties of the Advisory Council.

Members shall be allowed travel expenses, including per diem in lieu of subsistence, at rates authorized for employees of agencies under subchapter I of chapter 57 of title 5, United States Code, while away from their homes or regular places of business in the performance of services for the Advisory Council. Any such travel shall be approved by a Federal Government official in accordance with Standard Government Travel Regulations.

Annual Cost Estimates

Estimated annual costs for operating the Advisory Council, including compensation and travel expenses for members but excluding staff support, is $189,370. Estimate of staff-years of support required is 2.15 at an estimated annual cost of $248,311.

Reports

The Advisory Council shall annually prepare and submit to the Secretary, the Committee on Health, Education, Labor, and Pensions of the Senate, and the Committee on Energy and Commerce of the House of Representatives, a report describing the activities of the Advisory Council, including its findings and recommendations.

In the event a portion of a meeting is closed to the public, a report shall be prepared which shall contain at a minimum, a list of members and their business addresses, the Advisory Council's functions, dates, and places of meetings, and a summary of the Advisory Council activities and recommendations made during the fiscal year. A copy of the report shall be provided to the Department Committee Management Officer.

The information or content and conclusions of reports are those of the authors and should not be construed as the official position or policy of, nor should any official endorsement be inferred by, the Division of Nursing (DN), Bureau of Health Professions (BHPr), Health Resources and Services Administration (HRSA), Department of Health and Human Services (DHHS), or the U.S. Government.

Termination Date

The duration of the National Advisory Council on Nurse Education and Practice is continuing. Unless renewed by appropriate action prior to its expiration, this charter will expire on November 30, 2006.

Abstract

Violence against nurses is a complex and persistent occupational hazard facing the nursing profession. Paradoxically, the job sector with the mission to care for people appears to be at the highest risk of workplace violence. Nurses are among the most assaulted workers in the American workforce. Too frequently, nurses are exposed to violence – primarily from patients, patients' families, and visitors. This violence can take the form of intimidation, harassment, stalking, beatings, stabbings, shootings, and other forms of assault.

Psychological consequences resulting from violence may include fear, frustration, lack of trust in hospital administration, and decreased job satisfaction. Incidences of violence early in nurses' careers are particularly problematic as nurses can become disillusioned with their profession. Violence not only affects nurses' perspectives of the profession, but it also undermines recruitment and retention efforts which, in a time of a pervasive nursing shortage, threatens patient care.

The purpose of this report is to highlight the recommendations of the National Advisory Council on Nurse Education and Practice (NACNEP) with regard to this issue. In developing this report, the NACNEP conducted a review and assessment of the problem of violence against nurses. Analysis presented within this report is based on presentations by subject-matter experts, discussions, and workgroup sessions held by the NACNEP members. The NACNEP also conducted a comprehensive review of the literature in the area of violence in the nursing profession. Finally, the NACNEP developed recommendations integrating the analysis and literature review. The recommendations contained herein address regulatory issues, educational programs, nursing practice interventions, and data collection and dissemination issues as they relate to the problem of violence against nurses.

Executive Summary

The FY 2005 Annual Report of the National Advisory Council on Nurse Education and Practice (NACNEP) is based on the April 2005 meeting held in Rockville, Maryland. Three key topics were discussed at the meeting which included violence against nurses, the nurse critical shortage facility study, and nursing workforce diversity program exemplars. The primary focus of the meeting was the impact of violence against nurses. During the meeting, the NACNEP assessed the causes of violence against nurses; reviewed its impact on recruitment, retention, and prevention; considered intervention strategies; and developed recommendations. The NACNEP also learned about a study defining health care facilities with a critical shortage of nurses. The outcome of this study will be used in the administration of the Nursing Education Loan Repayment Program and the Nurse Scholarship Program. Finally, four grantees from the Nursing Workforce Diversity Program presented their work to the NACNEP. These grantees described successful strategies to recruit minority and disadvantaged individuals into nursing.

1. Violence against nurses: The primary focus of the meeting was the impact of violence against nurses. The NACNEP assessed the causes of violence against nurses; reviewed its impacts on recruitment, retention, and prevention; considered intervention strategies; and developed recommendations.

2. Nurse critical shortage facility study: The NACNEP learned about a study defining health care facilities with a critical shortage of nurses that will be used in the administration of the Nursing Education Loan Repayment Program and the Nurse Scholarship Program.

3. Nursing workforce diversity program exemplars: The NACNEP heard from exemplary projects promoting effective recruitment of minority and disadvantaged individuals into nursing under the Nursing Workforce Diversity Program.

1. Violence Against Nurses

Violence against nurses is a complex and persistent occupational hazard facing the nursing profession. Paradoxically, the job sector with the mission to care for people appears to be at the highest risk of workplace violence. Nurses are among the most assaulted workers in the American workforce. Too frequently, nurses are exposed to violence – primarily from patients, patients' families, and visitors. This violence can take the form of intimidation, harassment, stalking, beatings, stabbing, shootings, and other forms of assault.
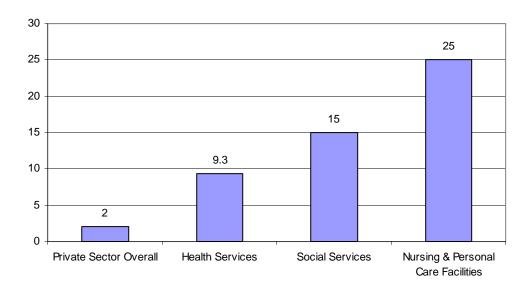
Psychological consequences resulting from violence may include fear, frustration, lack of trust in hospital administration, and decreased job satisfaction. Incidences of violence early in nurses' careers are particularly problematic as nurses can become disillusioned with their profession. Violence not only affects nurses' perspectives of the profession, but it also undermines recruitment and retention efforts which, in a time of a pervasive nursing shortage, threatens patient care.

The purpose of this report is to highlight the recommendations of the NACNEP with regard to this issue. In developing this report, the NACNEP conducted a review and assessment of the problem of violence against nurses. Analysis presented within this report is based on presentations by subject-matter experts, discussions, and workgroup sessions held by the NACNEP members. The NACNEP also conducted a comprehensive review of the literature in the area of violence in the nursing profession. Finally, the NACNEP developed recommendations integrating the analysis and literature review.

Overview of the Problem

There is considerable evidence that workers in the health care sector are at greater risk of violence than workers in any other sector. The U.S. Department of Labor, Bureau of Labor Statistics (BLS) showed that 48 percent of all non-fatal injuries from occupational assaults and violent acts occurred in health care and social services settings (U.S. Department of Labor, Bureau of Labor Statistics, 2001). The BLS data also showed that while two in 10,000 employees overall in the private sector suffer injuries annually that require time off from work, rates of injuries are significantly greater for health care employees. Annually, 9.3 in 10,000 employees in the health services sector suffer injuries that require time off from work. In nursing and personal care facilities, 25 in 10,000 employees suffer such injuries – more than 10 times the overall private sector rate. This data is depicted in the chart below.

Non-Fatal Incidences* per 10,000 Workers

* Incidence is defined as assault resulting in injury that requires time off from work
Source: U.S. Department of Labor, Bureau of Labor Statistics (2001).

Nurses are the most likely of all health care providers to be assaulted. The U.S. Department of Justice, Bureau of Justice Statistics (BJS), National Crime Victimization Survey 1993-1999 showed that the health care sector led all other sectors in the incidence of non-fatal workplace assaults and that nurses were the most likely of health care workers to be assaulted (U.S. Department of Justice, Bureau of Justice Statistics, 2001). Assault rates are particularly high among Emergency Department (ED) nurses (Roll, 2005). A study of 125 nurses at a regional medical center found that 82 percent of ED nurses had been physically assaulted at work during 2001 (May & Grubbs, 2002). As sobering as these numbers are, they are likely understated. In another survey only two-thirds of physical violence incidents against registered nurses (RNs) were reported (Gerberich et al., 2004).

The nursing profession faces unique challenges in addressing violence and its impact on the nursing workforce. These challenges result from factors such as poor working conditions, exposure to violent individuals, and a view that when violence does occur, it is part of the job. These factors, combined with fiscal constraints, organizational realities, inadequate administrative support, and lack of legislation to protect nurses, result in significant barriers to overcoming the problem of violence against nurses.

Moreover, the recruitment and retention problem resulting from this violence is especially problematic in light of the current nurse shortage. According to projections from the U.S. Bureau of Labor Statistics, more than one million new and replacement RNs will be needed by 2012 (U.S. Department of Labor, Bureau of Labor Statistics, 2004). Thirty states were estimated to have RN shortages as of 2000 (U.S. Department of Health and Human Services, 2002). This shortage is projected to accelerate over the next two decades, with 44 states plus the District of Columbia expected to have RN shortages by the year 2020 (U.S. Department of Health and Human Services, 2002). A nationwide hospital survey reported 126,000 RN vacancies (American Hospital Association, 2001). Currently in long-term care facilities, 15 percent of staff nurse (RN) positions are vacant. This shortage is jeopardizing access to high-quality patient care across the United States (American Health Care Association, 2004).

Over the years, there have been efforts to address the crisis of violence against nurses through educational and training curricula, violence prevention and intervention programs, and attempts to change a culture that tolerates violence. However, few such activities have been adequately evaluated for their effectiveness or implemented on a wide-scale basis.

Literature Review

In an effort to provide a background and context for this report, the NACNEP conducted a comprehensive literature review focusing on violence affecting nurses in the workforce. Included in the search were the published literature, unpublished policy statements, and guidelines and regulations from various agencies and organizations. Major topics explored in the literature included statistics on incidents of violence in the nurse workplace, risk factors, sources of data on violence against nurses, definitions of workplace violence, legislation, the impact of violence on nursing careers, and violence prevention and intervention programs.

Conclusion and Recommendations

Violence in the workplace is taking a significant toll on the nursing profession. Violence, both physical and psychological, has affected nurses' attitudes toward the nursing profession and recruitment and retention efforts. To address these challenges, the NACNEP is putting forward a set of recommendations in four areas: regulatory, educational programs; nursing practice interventions, and data collection and dissemination.

Through the following recommendations, the NACNEP believes progress can be made in addressing these challenges facing the profession.

Regulatory

- Develop and adopt a standard definition of workplace violence; strengthen and adopt regulatory and/or accrediting agency (e.g., Occupational Safety and Health Administration) recommendations on workplace violence in health care settings including institutional, community, and academic settings, as a requirement for workplace safety.

Educational Programs

- Target faculty development initiatives on violence in nursing focusing on prevention, early intervention, legal and ethical issues, and access to resources and referral systems in both educational and clinical environments.

- Target funding to support basic and continuing education initiatives focused on evidence-based core competencies (knowledge, attitudes, skills, and behaviors) related to workplace violence and violent behaviors.

- Improve basic and continuing education programs for nursing personnel, including faculty, staff, and students, on self-protection in violent situations and competency in violence prevention and management.

Nursing Practice Interventions

Transition the health care culture into one in which a secure work environment for nurses and other health care workers is a priority:

- Establish clear standards for workplace safety supported by resources for the management of violence.

- Eliminate institutional barriers for a safe work environment by supporting a culture of open communication and reporting among nursing staff, faculty, health care personnel, and students regarding violence in the workplace.

- Offer violence prevention and management training in the workplace.

- Keep violence and security issues on the radar screen of risk managers in health care facilities.

- Provide clearly defined support resources, such as legal and psychological services, to nurses in violent situations, or at risk of facing violent situations.

- Include violence prevention and management in the criteria for the American Nurses Credentialing Center Magnet Recognition Program.

- Support demonstration projects for implementation of best practice models in violence prevention and management in health care settings.

- Disseminate information on model violence prevention programs and best practices including programs appropriate for smaller/rural health care facilities.

- Disseminate information on available resources and best-practices for violence prevention and management protocols in health care settings.

- Develop guidelines for conducting employee and student background checks on violent behavior.

Data Collection and Dissemination

- Collate and analyze data on workplace violence from government agencies (e.g., Centers for Disease Control and Prevention, Occupational Safety and Health Administration, the Department of Justice), health care facilities, community-based settings, and in nursing education to:

  - Assess the scope and incidence of workplace violence in Federally funded agencies and track the changes in rates of violence due to policy and procedure interventions;

  - Assess the impact of workplace violence on nurse recruitment and retention;

  - Assess management, documentation, and response to violence in the workplace; and

  - Disseminate information to health care settings in support of increased violence prevention and management programs.

- Incorporate into the 2008 National Sample Survey of Registered Nurses questions on violence in the workplace including the types of violence experienced, formal documentation of violence, and the effect of violence on job satisfaction and retention.

- Provide resources for research on violence against nurses to determine effective prevention, intervention, and management strategies.

2. Nurse Critical Shortage Facility Study

The Nursing Education Loan Repayment Program and the Nurse Scholarship Program are programs in which participants provide nursing service in health care facilities with a critical shortage of nurses as stipulated in the Title VIII legislation. Shortages of nurses are seen across the Nation in all types of health care settings. Council members were briefed on a two-year study at the Center for Health

Workforce Studies, State University of New York (SUNY), Albany, to identify the essential components of a comprehensive, national methodology for identifying facilities and agencies with critical shortages of registered nurses.

3. Nursing Workforce Diversity Exemplars

In response to the NACNEP's duties and requests for ongoing information on Title VIII programs and diversity programs in particular, a panel of four Nursing Workforce Diversity Program Exemplars was convened to share successes and accomplishments of their programs to increase nursing education opportunities for individuals from disadvantaged and minority backgrounds.

1. Violence Against Nurses

- Introduction
- Prevention and Intervention Programs and Strategies
- Status of Research on Violence Against Nurses
- Recommendations
- References

1. Violence Against Nurses

1.1. Introduction

Violence against nurses is a complex and persistent occupational hazard facing the nursing profession. This violence can take the form of intimidation, harassment, stalking, beatings, stabbings, shootings, and other forms of assault. Nurses are among the most assaulted workers in the American workforce. Psychological consequences resulting from violence may include fear, anxiety, sadness, depression, frustration, mistrust, and nervousness. These consequences can have a negative impact on nurse retention.

To evaluate the problem of violence against nurses and its impact, and to develop recommendations to address the problem, the National Advisory Council on Nurse Education and Practice (NACNEP) conducted a thorough literature review in 2005 focused on the problem of violence affecting the nursing workforce. Included in the review were published literature, unpublished policy statements, and guidelines and regulations from various agencies and organizations. The major topics explored were the nature of violence in the nursing workplace (including statistics, risk factors, violence directed against nurses, inter-staff violence, and violence directed at patients by nurses); violence in the nursing education environment; violence experienced by nurses outside of the workplace; and violence toward patients that is detected, reported, and addressed by nurses.

The purpose of this report is to highlight the NACNEP's review of the problem of violence against nurses and put forward recommendations to address the problem.

1.1.1. Overview of the Problem

"Workplace violence is one of the most complex and dangerous occupational hazards facing nurses working in today's health care environment. The complexities arise, in part, from a health care culture resistant to the notion that health care providers are at risk for patient-related violence combined with complacency that violence (if it exists) 'is part of the job.' The dangers arise from the exposure to violent individuals combined with the absence of strong violence prevention programs and protective regulations. These factors together with organizational realities such as staff shortages and increased patient acuity create substantial barriers to eliminating violence in today's health care workplace."

(McPhaul & Lipscomb, 2004)

The media has provided extensive coverage of workplace murders by disgruntled former or current employees in the general workforce. Those events, while certainly serious, are relatively rare. Far more common are assaults, threats, stalkings, and other forms of non-fatal violence in the workplace. Violence targeted at health care workers is of particular concern, as these workers are among the most likely in the workplace to be assaulted.
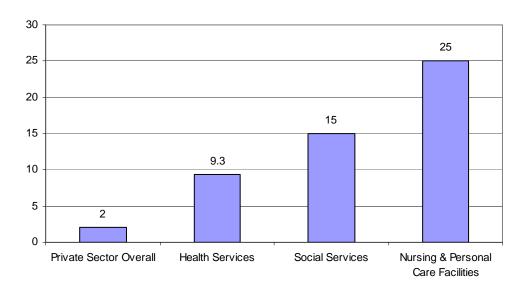
Incidences of violence early in nurses' careers are particularly problematic as they may lead nurses to become disillusioned with their profession. Nurses often feel powerless to deal with a situation in which they have been victimized and, as a result, accept violence as part of the job. Homeyer (2005) found nurses are often reprimanded or fired if they defend themselves against violence.

As job satisfaction decreases as a result of violence, the likelihood of nurses leaving their employment increases with nurses finding different roles within the health care setting or leaving the profession entirely (Shader, Broome, Broome, West, & Nash, 2001). The lack of support from administrators in addressing problems of violence in the workplace is a contributor to burnout and resignations of even the most seasoned veteran nurses. This is an issue that the profession and health care industry cannot continue to ignore especially in light of the current nursing shortage.

Statistics on Violence against Nurses

There is considerable evidence that workers in the health care sector are at greater risk of violence than workers in any other sector. The U.S. Department of Labor, Bureau of Labor Statistics (BLS) showed that 48 percent of all non-fatal injuries from occupational assaults and violent acts occurred in health care and social services settings (U.S. Department of Labor, Bureau of Labor Statistics, 2001). The BLS data also showed that while two in 10,000 employees overall in the private sector suffer injuries annually that require time off from work, rates of injuries are significantly greater for health care employees. Annually, 9.3 in 10,000 employees in the health services sector suffer injuries that require time off from work. In nursing and personal care facilities, 25 in 10,000 employees suffer such injuries – more than 10 times the overall private sector rate. This data is depicted in the chart below.

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Nurses are especially at risk as they are the most likely of all health care providers to be assaulted. The U.S. Department of Justice, Bureau of Justice Statistics (BJS) National Crime Victimization Survey 1993-1999 showed that the health care sector led all other industry sectors in the incidence of non-fatal workplace assaults and that nurses are the most likely of health care workers to be assaulted (U.S. Department of Justice, Bureau of Justice Statistics, 2001). According to the Department of Justice data, nurses are 57 percent more likely to be assaulted than are physicians. Assault rates are particularly high among emergency department (ED) nurses (Roll, 2005). In a recent survey of 125 ED nurses, intensive care unit and general floor nurses at a regional medical center, 82 percent of ED nurses had been physically assaulted at work during 2001 (May & Grubbs, 2002).

Underreporting of Statistics

As sobering as these numbers are, they are likely understated. Nurses are reluctant to report violence that is committed against them in the workplace. One study involving nearly 8,800 nurses in 210 hospitals revealed that 70 percent of the nurses experiencing abuse had not reported that mistreatment (Duncan & Hyndman, 2001). A survey of more than 4,700 Minnesota nurses revealed that only 69 percent of physical violence incidents were reported (Gerberich et al., 2004). In a study by Findorff, McGovern, Wall, and Gerberich (2005), of the 923 respondents who experienced aggression from physicians, 43 percent did not report the incident to their employer. Of those who experienced other non-physical violence at work, 60 percent did not report these events. In this same study, when violence incidents were reported, 86 percent of the reports were oral (rather than written reports). These findings suggest that violence incidents are significantly underreported and that those incidents that are reported may be under managed.

The causes for underreporting are numerous. Many nurses believe that being assaulted may be viewed as poor performance on their part, or that assaults are just part of the job. In a survey of emergency room nurses, more than half agreed with the statement, "Nurses who take legal action against a patient are in jeopardy of losing their jobs." In addition, 76 percent stated that their decision would be based on whether the patient was perceived as being responsible for their action (Erickson & Williams-Evans, 2000). When nurses are assaulted in the workplace, they typically feel compelled to consider a variety of factors before taking legal action against the assaulting patient. This may involve some accommodation because the nurses believe that assailants (e.g., psychotic patients, distraught family members) may not know what they are doing. Erikson and Williams-Evans (2000) asserted that most nurses believe violence and assault are part of the job, and they presented evidence suggesting workplace violence has a normative effect, meaning that over time, frequent violent acts and aggression gradually become accepted as part of the workplace culture.

In addition, nurses are often confused about what legally constitutes abuse or assault, and policies and procedures for reporting violent events are not clear (May & Grubbs, 2002). The literature overwhelmingly suggests that nurses generally feel unsupported by management in relation to workplace violence, and this could well influence a nurse's decision not to report unacceptable behavior (Jackson, Claire, & Mannix, 2002). There is a belief that hospital administration may want to avoid the publicity that could accompany pressing charges against a patient (Homeyer, 2005). This may discourage nurses from taking legal action, because they perceive management will not support them.

> "Nurses also suffer from societal tolerance of violence. The legal system has on several occasions refused to grant compensation to nurse victims. This was justified on the principle that to practise nursing was to accept the risk of personal violence. Nurses themselves often feel that they are 'legitimate targets' and that violence is 'part of the job'.
> (International Council of Nurses, n.d.)

The NACNEP recommends eliminating institutional barriers for a safe work environment by supporting a culture of open communication and reporting among nursing staff, faculty, health care personnel, and students regarding violence in the workplace. Furthermore, the NACNEP recommends providing clearly defined support resources such as legal and psychological services to nurses in violent situations or at risk of facing violent situations.

1.1.2. Types of Violence Affecting the Nursing Workforce

Violence that affects the nursing workforce comes in many forms. The most common form is violence committed by patients in the workplace. However, violence affecting nurses is also seen in the educational setting and outside the workplace.

Violence in the Workplace

Forty-five percent of violence committed against nurses in health care facilities is inflicted by patients. Nearly one-third of violent acts against nurses are committed by family members of patients, visitors, and health care providers, including physicians (Homeyer, 2005). Typically, the assailants are males who are impaired (Gerberich et al., 2004). The most common causes of assault by family members of patients are anger related to staff enforcement of hospital policies, the patient's situation or condition, long wait-times, or the health care system in general (May & Grubbs, 2002). This type of violence is most common in nursing homes, long-term care facilities, intensive care units, emergency departments, and psychiatric departments.

> "Ninety-five percent of nurses around the world are women. Attitudes towards women are often reflected in interactions with the profession. …Health care workers are more likely to be attacked at work than prison guards or police officers. Nurses are the health care workers most at risk, with female nurses considered the most vulnerable. General patient rooms have replaced psychiatric units as the second most frequent area for assaults. Physical assault is almost exclusively perpetrated by patients. 97 percent of nurse respondents to a UK survey knew a nurse who had been physically assaulted during the past year. 72 percent of nurses don't feel safe from assault in their workplace. Up to 95 percent of nurses reported having been bullied at work. Up to 75 percent of nurses reported having been subjected to sexual harassment at work."
>
> (International Council of Nurses, n.d.)

While patients are the most frequent source of sexual harassment and physical assault against nurses, over half of the sexual assaults are committed by physicians (Williams, 1996). Physicians are also a frequent source of verbal abuse (Sofield & Salmond, 2003). In a survey of 1,000 nurses at a large hospital system, 91 percent of respondents had experienced verbal abuse in the prior month and the most frequent aggressor was a physician (Sofield & Salmond, 2003). Farell (1999) and McMillan (1995) also found that nurse managers often used aggression toward staff nurses.

Violence in health care facilities is fostered by a complex set of institutional and social forces that work to aggravate the problem.

Cost pressures: Cost pressures make it difficult to train staff to deal with violence in the workplace. Not only is the cost of training expensive, but when combined with paying the salaries of other staff to cover for those in training, the overall costs can be prohibitive (Roll, 2005).

Staffing shortages: Staffing shortages have resulted in lower standards for hiring (Bradley & Moore, 2004). Under pressure to fill vacant positions, given the nursing shortage, facilities may take shortcuts in the hiring process or adhere to lower standards for staff hired. Nurses and other employees who have not been subjected to effective internal screening practices, including a review of prior employment records, criminal convictions, or driving records, put the institution at risk (Bradley & Moore, 2004).

Characteristics of patients: Acute care settings are under increasing financial pressures including those from growing numbers of uninsured patients, and this, combined with staffing shortages, can

result in longer patient wait-times and inadequate security – both risk factors that can contribute to violence (McPhaul & Lipscomb, 2004). Family violence is also pervasive, and nurses often encounter violent family situations that make their way into health care settings (Gerberich et al., 2005). Furthermore, many of the patients at risk for perpetrating acts of violence are cognitively impaired at the time they enter the nursing workplace or distressed by their health problems, increasing the likelihood of their committing aggressive acts.

Poor or stressful working conditions: Substandard conditions in workplace environments, characterized by poor communication and under resourced facilities, lead to tensions that can contribute to aggression (Duxbury & Whittington, 2005). Additional risk factors leading to violence in the workplace include working in intensive care, mental health, and emergency departments (Findorff, McGovern, Wall, Gerberich, & Alexander, 2004), most likely because of the high stress in these work sites.

Attitudes among management, nurses, and students: As described previously, an accepting attitude toward violence in the workplace is commonplace (Beech, 2001). Often, customer service initiatives (e.g., minimizing the physical barriers between caregivers and patients, encouraging nurses to "be nice" to customers) take priority over facilities' focus on keeping the staff safe from aggressive patients (Homeyer, 2005).

The NACNEP recommends offering violence prevention and management training in the workplace and keeping violence and security issues on the radar screen of risk managers in health care facilities.

Violence in the Nursing Education and Training Environment

Academic environments are also vulnerable to violence. Love and Morrison (2003) noted studies documenting increased verbal threats, harassment, intimidation, and stalking of nursing faculty by students who are experiencing academic problems or facing termination from the program. Many schools have instituted criminal background check policies for students and faculty in efforts to address this problem (Burns, Frank-Stromborg, Teytelman, & Herren, 2004). Tate and Moody (2005) discussed extending authority to conduct criminal background checks for nurses. They also proposed conducting checks for students upon entry to clinical nursing courses and as a pre-requisite for graduation and application for licensure. Typically, applicants are required to pay for criminal background checks (National Council of State Boards of Nursing, 2005). The NACNEP recommends developing guidelines for conducting employee and student background checks on violent behavior.

1.1.3. Impact of Violence on Recruitment and Retention

Violence in the health care workplace is of particular concern given the importance of retention in the nursing profession. It is strongly correlated to factors in job dissatisfaction such as powerlessness and low morale (Jackson et al., 2002). This feeling of lack of empowerment among nurses, due directly to violence in the workplace, has often been correlated with sick leave, burnout, and poor recruitment and retention rates (Jackson et al., 2002).

Workplace aggression is the most anxiety-provoking aspect of nursing work for a significant number of nurses, and the high levels of workplace violence experienced by nurses may be a factor in the loss of experienced staff (Sourdiff, 2004). It is often "the straw that breaks the camel's back" that causes nurses, who often feel overworked and inadequately protected against workplace violence, to leave their jobs (McPhaul & Lipscomb, 2004).

Effects of Non-Physical Abuse on Retention

One of the least-reported forms of violence is non-physical, though it may be more prevalent than physical violence in affecting the retention of nurses (Findorff, McGovern, & Sinclair, 2005). In a survey of 1,000 nurses, Sofield and Salmond (2003) found that more than half of the respondents did not feel competent in responding to verbal abuse while 91 percent had experienced verbal abuse in the past month. They also found that non-physical violence left the recipient feeling personally or professionally attacked, devalued, or humiliated. Verbal abuse significantly impacts the workplace by decreasing morale and job satisfaction, and creating a hostile work climate (Sofield & Salmond, 2003). Communication between nurses and physicians is one area where studies show verbal abuse may have a significantly disruptive impact on a nurse's intention to stay at a job. Rosenstein (2002) found that 30 percent of surveyed nurses knew of nurses who had left an organization because of disruptive communication and verbal abuse by physicians. Sofield and Salmond (2003) found that physicians were the most frequent source of verbal abuse, followed by patients, patients' families, peers, supervisors, and subordinates. They found that the amount of abuse and intent-to-leave were significantly related. The authors found that 12 percent of the nurses surveyed planned to actively look for a new job within the next year and 22 percent would consider resigning as a result of verbal abuse.

Effects of Physical Violence on Nursing Retention

Physical abuse is more readily reported and thus better tracked than non-physical abuse. In a recent survey by the Maryland Nurses Association, 18 percent of respondents indicated they had left a job because they feared for their safety; 15 percent of respondents indicated that at some point they wanted to leave but they hadn't yet done so (Distasio, Hall, & Beachley, 2005). A survey of ED employees in an urban inner city tertiary care center in Vancouver, British Columbia, showed that 68 percent reported an increased frequency of violence over time and 60 percent reported an increased severity of violence. This included verbal abuse (75 percent) and witnessing physical threats or assaults (86 percent). Over half (57 percent) of respondents were physically assaulted in 1996, with about half reporting impaired job performance for the rest of the shift or week, 73 percent indicating they were afraid of patients after the event, and 74 percent reporting reduced job satisfaction. In this survey, of those no longer working in the ED, 67 percent reported they had left due to violence (Fernandes et al., 1999). In a survey by Erikson and Williams-Evans (2000), 14 percent of the nurses surveyed had considered transferring out of their department, and 18 percent stated that they had considered leaving the nursing profession altogether because of fear of physical abuse.

> "Seventy percent of nurses are assaulted on duty during their careers. And I ask, why would anyone want to be in this profession with these documented statistics? … After incidents of verbal and physical abuse, nurses often develop characteristics of a victim with feelings of incompetence, guilt, powerlessness, fear of criticism and worthlessness. Instead of seeking care, often nurses just leave the profession or change careers."
> (Homeyer, 2005)

Evidence indicates there is more job turnover associated with stress for younger nurses than with older nurses (Shader et al., 2001). As a result, the impact of violence on retention of younger nurses is perhaps more significant than it is with older nurses.

Violence can also have an impact on recruitment. It is one of the factors that often make nurses reluctant to recommend nursing as a career choice. Over half (53 percent) of nurses who were surveyed would not recommend the nursing profession as a career choice for their children and 23 percent would actively discourage someone close to them from entering the profession (Keough, Schlomer, & Bollenberg, 2003).

1.2. Prevention and Intervention Programs and Strategies

A large number of violence prevention and reduction interventions exist. However, few of these have been evaluated to determine their effectiveness. This section describes prevention and intervention strategies intended to reduce violence in the nursing workplace.

1.2.1. Reducing Violence in the Nursing Workplace

Education and Training

Educating nursing staff to prevent and respond to workplace violence is a common strategy intended to reduce the incidence and impact of violence. Psychiatric facilities in particular experience a high incidence of aggressive behavior and have utilized several different approaches to their management through staff training. In psychiatric settings, studies have shown that training staff in violence prevention and verbal and physical de-escalation not only improves provider knowledge and confidence in handling violent situations, but also reduces injuries (Lehman, Padilla, Clark, & Loucks, 1983; Infantino & Musingo, 1985, as cited in Morrison & Carney-Love, 2003). In an assessment of several commonly used programs for managing aggressive behavior in psychiatric settings, Morrison and Carney-Love (2003) noted that these programs have progressed in recent years from being largely reliant on physical techniques of self-defense to incorporating more therapeutic principles. The authors suggested that this move was positive and consistent with the United Kingdom's 2002 standards for the education of managing aggressive behavior (United Kingdom Central Council for Nursing, Midwifery, and Health Visiting, 2002), but they argued that further evaluation of these programs is needed to determine their effectiveness.

> "Every employee should understand the concept of 'universal precautions for violence' — that is, that violence should be expected but can be avoided or mitigated through preparation. Frequent training also can reduce the likelihood of being assaulted."
>
> (Occupational Safety and Health Administration, 2004, p.19)

Nachreiner, Gerberich, McGovern, Church, Hansen, and Geisser (2005b) attempted to determine if violence prevention training decreased workplace violence experienced among Minnesota nurses. While most nurses in the survey (a random sample of the states' RNs and licensed practical nurses [LPNs]) reported receiving some training about workplace violence, the study did not find this training to be protective against workplace violence. The study raises questions about why this finding might be occurring. The study could not control for type or quality of the training, nor could it control for the possibility that training leads to a heightened recognition of violence and increased reporting among trained nurses. More rigorous examination of the value of training on work-related violence would be useful in this regard.

The NACNEP recommends targeting funding to support basic and continuing education initiatives focused on evidence-based core competencies (knowledge, attitudes, skills, and behaviors) related to workplace violence and violent behaviors. The NACNEP also supports improving basic and continuing education programs for nursing personnel including faculty, staff, and students on self-protection in violent situations and competency in violence prevention and management.

Institutional Policies

There is somewhat more evidence that institutional policies regarding workplace violence are effective in reducing violence. Zero-tolerance policies for violence in the workplace have been recommended in various arenas such as in the Occupational Safety and Health Administration's (OSHA's) "Guidelines for Preventing Workplace Violence for Health Care and Social Service Workers" (Occupational Safety and Health Administration, 2004). OSHA recommends employers create a clear policy of zero tolerance for workplace violence, verbal and non-verbal threats, and related actions (Occupational Safety and Health Administration, 2004).

A survey of Minnesota nurses found zero-tolerance policies in effect in many work sites, and the odds of physical assault decreased among nurses working in locations with these policies (Nachreiner et al., 2005a). In the same study, various other workplace violence prevention measures were examined for effectiveness. These included prohibitions of specific behaviors (such as physical assault, threats, sexual harassment, or verbal abuse), assurances of confidentiality in reporting, flagging charts of repeatedly violent patients, delineating consequences for those who were violent at work, requiring violence training for staff, and training in reporting violent incidents. The authors found that the nurses' odds of physical assault decreased only in cases where their work settings had policies that prohibited specific types of violent behaviors.

> "Many of our administrators don't even know that the OSHA guidelines are out there and they are specific for hospitals… The goal of the OSHA program is to eliminate or reduce worker exposure to violence by implementing effective security devices and administrative work practices. Unfortunately, these often just don't hit the radar screens of most hospitals. Most hospitals do have a security and safety plan, but most address safety [issues] like the fire plan, or patient safety … Few focus on staff safety, especially from assaultive patients."
>
> (Homeyer, 2005)

The NACNEP recommends establishing clear standards for workplace safety supported by resources for the management of violence.

Legislative Interventions

Very little legislation has been enacted specifically to protect nurses. In many states it is not a felony to assault a nurse. In some states, it is a felony to attack a physician but a misdemeanor to attack a nurse. A key piece of legislation intended to provide protection for hospital workers is the Occupational Safety and Health Act of 1970, which mandates that, in addition to compliance with hazard-specific standards, all employers have a general duty to provide their employees with a workplace free from recognized hazards likely to cause death or serious physical harm (Homeyer, 2005). OSHA, authorized by the Act, set forth guidelines to provide a safety and health program that includes violence prevention. These guidelines are advisory only and provide supporting information. They are voluntary and intended to help employers establish effective workplace violence prevention programs. In some cases the employer can be cited for violation of the general duty clause if it fails to implement certain guidelines (Homeyer, 2005). These guidelines address only the violence inflicted by patients or clients against staff. They do not explicitly address violence inflicted by third parties; however, OSHA suggests that workplace violence policies indicate a zero-tolerance for all forms of violence from all sources.

California provides an example of a legislative intervention to prevent workplace violence. In 1993, the California Hospital Security Act (AB508) passed which included requirements for acute care

facilities to provide safety and security training to employees, conduct assessments of facility safety and security, develop and implement a security plan, and report to authorities all assault and battery acts within 72 hours of occurrence (Peek-Asa, Cubbin, & Hubbell, 2002). Surveys of California's emergency departments before and after implementation of AB508 found that the hospitals reported fewer violent episodes after its implementation as well as overall improvements in the departments' security programs, but the study could not directly attribute these improvements to the legislation (Peek-Asa, Cubbin, & Hubbell, 2002).

> "The scientific community, government regulators, health care employers, professional associations, and health care unions should craft a regulation acceptable to all that will reduce the violence endemic in today's health care environment."
>
> (McPhaul & Lipscomb, 2004)

Guidelines

Various organizations have prepared guidelines and recommendations to prevent and manage violence in the workplace. For example:

- American Nurses Association (ANA), 2002. Preventing workplace violence. ANA. Washington, DC.

- International Council of Nurses (ICN), 2000. Position statement: Abuse and violence against nursing personnel. ICN. Geneva, Switzerland.

- National Institute for Occupational Safety and Health (NIOSH), 2002. Violence: Occupational hazards in hospitals. NIOSH Publication number 2002-101. U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention. Washington, DC.

- Occupational Safety and Health Administration (OSHA), 2004 (revised). Guidelines for Preventing Workplace Violence for Health Care and Social Service Workers. U.S. Department of Labor, Occupational Safety and Health Administration. Washington, DC.

1.2.2. Strategies for Changing the Health Care Culture

The culture of violence pervades the health workplace. This in part reflects the community at large. But despite the calls by researchers and the public alike for a change in the culture that supports or promotes violence in the workplace, there is very little in the literature that specifies exactly how this culture should or can be changed and whether such a strategy would be effective. Although this elusive goal has wide support, additional research is needed to develop and assess strategies that have the potential to change a culture that is so well-rooted and pervasive.

Some researchers highlight the importance of advocacy of nurses and establishment of a zero-tolerance policy to protect nurses (Henderson, 2003). Others emphasize the impact of environmental factors such as use of coercion and an authoritarian nursing style as precursors to patient aggression (Duxbury & Whittington, 2005). Other research points out the need for additional research and the need to better understand the culture of violence in hospitals (Duncan & Hyndman, 2001; May & Grubbs, 2002; Findorff, McGovern, & Sinclair, 2005).

1.2.3. Basic and Continuing Education and Training Curricula

It is difficult to identify appropriate violence-related training for nurses, and there is little published evidence of the effectiveness of the training and education programs currently in place. Nonetheless, there is strong sentiment and general agreement among many in the profession that effective basic and continuing education and training in violence identification, prevention, and treatment are needed. This has been the position of many policy organizations such as the American Nurses Association.

Limitations of Violence Training and Education

The lack of evidence of the effectiveness of education and training tools may be a reason why there appears to be limited violence training and education in nursing schools. In a 1999 follow-up to a 1995 national survey of baccalaureate nursing programs in the United States, little change was found in the overall nursing violence-related curriculum; the majority of schools reported no violence-related faculty development during the past four years, 68 percent did not systematically evaluate violence content, and 75 percent had not developed violence-focused student competencies (Woodtli & Breslin, 2002). The NACNEP recommends targeting college and nursing school faculty development initiatives on violence in nursing focusing on prevention, early intervention, legal and ethical issues, and access to resources and referral systems in both educational and clinical environments.

With regard to a workplace violence curriculum, more than 40 percent of nurses responding to a survey of Minnesota nurses reported that they were trained in workplace violence (Nachreiner et al., 2005a). But the long-held belief that violence is part of the nursing job, and that it is an inherent nursing occupational hazard, is thought to limit the extent of violence prevention training and education in the nursing workforce (Pieri, 2004). In addition, the incidence of workplace violence prevention and management training may be low because the effectiveness of the training tools that are available is not known (Nachreiner et al., 2005b).

> "According to a recent study, nearly a half million nurses per year reported that they were victims of violent crimes in the workplace. But workplace violence is preventable and should never be accepted as part of the job."
> (American Nurses Association, 2002, p.2)

1.3. Status of Research on Violence Against Nurses

This section describes the status of research efforts related to violence against nurses, including sources of data and research, and efforts to develop standardized definitions of workplace violence.

1.3.1. Sources of Data and Research

One of the major challenges in documenting the crisis of violence affecting the nurse workforce is the absence of systematic and coordinated data collection procedures and scant research on these issues. Problems with the availability of data and research include few data sources to determine the magnitude of the problem and variations in definitions, data sources, and methods used in research. Fragmented and inconsistent funding for research, educational program development and testing add additional layers of complexity. Finally, issues exist with curricular evaluation on preventing violence in the nursing workplace.

Because information on this important topic is limited, it must be collected from numerous sources including web sites, organizations, and government agencies. While it is important to have uniform categories and definitions for violence in the health care setting, there are no standard reporting definitions or mechanisms for documenting violence in the health care workplace that would facilitate determination of the scope and prevalence of the problem (Gershon, 2001).

There are insufficient health care violence-specific measurement and reporting mechanisms in place for compiling reliable data on violent injuries to nursing staff (Love & Morrison, 2003). These authors indicated that among the policy recommendations of the American Academy of Nursing Expert Panel on Violence is the development of a national database using consistent definitions of injuries and violent events so that the true extent of the problem in health care and educational settings can be measured reliably. They added that until pressure is brought to bear from outside regulatory agencies such as OSHA and the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), hospitals must rely on themselves for identifying and managing violence toward health care staff. While OSHA has published workplace prevention guidelines for health care facilities and recommends a zero tolerance level for violence, Love and Morrison (2003) recommend adopting standards instead of guidelines.

> "It is important to have uniform categories and definitions for violence in the healthcare setting for a wide range of reasons, not the least of which is to have a uniform surveillance system. Unfortunately, there are no standard reporting definitions or mechanisms for health-care workplace violence, and this would be a necessary first step in determining the prevalence and scope of the problem at the international level."
>
> (Gershon, 2001, p.24)

There is an absence of systematic national data collection on workplace assaults, as well as scarce data evaluating violence prevention strategies (McPhaul & Lipscomb, 2004). Methodological problems such as reporting overall prevalence rates as averages obscure the extremely high levels of aggression experienced in some departments and by specific staff (Winstanley & Whittington, 2004).

The NACNEP recommends collecting and analyzing data on workplace violence from government agencies (e.g., Centers for Disease Control and Prevention, Occupational Safety and Health Administration, the Department of Justice), health care facilities, community-based settings, and in

nursing education to assess the scope and incidence of workplace violence in Federally funded agencies and track the changes in rates of violence due to policy and procedure interventions. They also recommend assessing the impact of workplace violence on nurse recruitment and retention; assessing management and documentation of the response to violence in the workplace; and disseminating information to health care settings in support of increased violence prevention and management programs.

1.3.2. Standardized Definitions of Workplace Violence

The dearth of systematic data collection procedures and sources for reporting and compiling data on violence in the nursing workforce is mirrored by the absence of a standardized definition of workplace violence. The Institute of Medicine established some common descriptions and terms to carry out its charge. Violence was defined broadly to include "physical, emotional, psychological, and sexual harms; the potential for harms; intentional and unintentional injury; and abuse and neglect" (Cohn, Salmon, & Stobo, 2001, p.17). The magnitude of the problem is difficult to assess. For example, rates vary depending on whether one includes in reporting databases severe physical injury only as compared to more minor injuries. The report states, "the heterogeneity of definitions and evidentiary requirements makes accuracy in incidence data extremely difficult to achieve" (Cohn et al., p.22).

There is a lack of consistency in defining workplace violence across countries and at national and local levels, although a broad rather than limited definition of violence is typically used (Wiskow, 2002). Different definitions of terms like aggression and violence make it difficult to assess changes in rates over time or across studies (Winstanley & Whittington, 2004). "Social and cultural changes are likely to contribute to the evolution of definitions of aggression necessitating some adjustment in research definitions, thus making the accuracy and detail of reporting of particular importance" (Winstanley & Whittington, 2004, p.9). Furthermore, terms that are employed can be interpreted differently by different parties.

The NACNEP recommends developing and adopting a standard definition of workplace violence and disseminating information on available resources and best-practices for violence prevention and management protocols in health care settings.

There is little consensus on how to rank the degree of violence severity. This is in part due to many nurses accepting violence as inevitable in the health care workplace (Anderson, 2001). A broad spectrum of behaviors is included among those considered to be violent, threatening, or intimidating. Waddington, Badger, and Bull (2005) interviewed 54 police officers and 62 health care professionals and social workers who had experienced episodes of violence in the workplace and found that there were varied meanings and interpretations ascribed to the term "violence." Violence can range from physical assault to attacks directed at property to non-physical aggression including verbal aggression and threats. An inclusive definition of violence can be considered to respect the diversity of experience and the subjective nature of violence, but a broad definition may not be useful in specific applications. The authors proposed a taxonomy of interpersonal harm that considers and differentiates factors such as the relationship between the parties involved, whether or not the situation is one of conflict, the duration and intensity of the incident(s), the target of the attack, whether or not the harm was deliberate, whether harm was realized, and whether there were legitimate grounds for complaint.

The Centers for Disease Control and Prevention's (CDC) National Institute of Occupational Safety and Health (NIOSH) defines workplace violence as "violent acts (including physical assaults and threats of assaults) directed toward persons at work or on duty" (National Institute of Occupational Safety and Health, 2002, p.1). Violence is defined by the American Federation of State, County and Municipal Employees (AFSCME) as "any act of aggression that causes physical or emotional harm, such as physical assault, rape, verbal abuse, threats (including bomb scares), and even sexual harassment"

(American Federation of State, County and Municipal Employees, 1998). While almost one million people become victims of violent crimes each year at work or on duty, many incidents of workplace violence are not reported.

1.4. Recommendations

Violence in the workplace is taking a significant toll on the nursing profession. Violence, both physical and psychological, has had a negative impact on nurses' attitudes toward the nursing profession, and recruitment and retention efforts. To address these challenges, the NACNEP is putting forward a set of recommendations in the following four areas: regulatory; educational programs; nursing practice interventions; and data collection and dissemination. Through the following recommendations, the NACNEP believes progress can be made in addressing these challenges facing the profession.

Regulatory

- Develop and adopt a standard definition of workplace violence; strengthen and adopt regulatory and/or accrediting agency (e.g., Occupational Safety and Health Administration) recommendations on workplace violence in health care settings including institutional, community, and academic settings, as a requirement for workplace safety.

Educational Programs

- Target faculty development initiatives on violence in nursing focusing on prevention, early intervention, legal and ethical issues, and access to resources and referral systems in both educational and clinical environments.

- Target funding to support basic and continuing education initiatives focused on evidence-based core competencies (knowledge, attitudes, skills, and behaviors) related to workplace violence and violent behaviors.

- Improve basic and continuing education programs for nursing personnel including faculty, staff, and students, on self-protection in violent situations and competency in violence prevention and management.

Nursing Practice Interventions

Transition the health care culture into one in which a secure work environment for nurses and other health care workers is a priority:

- Establish clear standards for workplace safety supported by resources for the management of violence.

- Eliminate institutional barriers for a safe work environment by supporting a culture of open communication and reporting among nursing staff, faculty, health care personnel, and students regarding violence in the workplace.

- Offer violence prevention and management training in the workplace.

- Keep violence and security issues on the radar screen of risk managers in health care facilities.

- Provide clearly defined support resources such as legal and psychological services, to nurses in violent situations, or at risk of facing violent situations.

- Include violence prevention and management in the criteria for the American Nurses Credentialing Center Magnet Recognition Program.

- Support demonstration projects for implementation of best practice models in violence prevention and management in health care settings.

- Disseminate information on model violence prevention programs and best practices including programs appropriate for smaller/rural health care facilities.

- Disseminate information on available resources and best-practices for violence prevention and management protocols in health care settings.

- Develop guidelines for conducting employee and student background checks on violent behavior.

Data Collection and Dissemination

- Collate and analyze data on workplace violence from government agencies (e.g., Centers for Disease Control and Prevention, Occupational Safety and Health Administration, the Department of Justice), health care facilities, community-based settings, and in nursing education to:

  - Assess the scope and incidence of workplace violence in Federally funded agencies and track the changes in rates of violence due to policy and procedure interventions;

  - Assess the impact of workplace violence on nurse recruitment and retention;

  - Assess management, documentation, and response to violence in the workplace; and

  - Disseminate information to health care settings in support of increased violence prevention and management programs.

- Incorporate into the 2008 National Sample Survey of Registered Nurses questions on violence in the workplace including the types of violence experienced, formal documentation of violence, and the effect of violence on job satisfaction and retention.

- Provide resources for research on violence against nurses to determine effective prevention, intervention, and management strategies.

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2. Nurse Critical Shortage Facility Study

- Background
- Study approach
- Study progress
- Preliminary update

2. Nurse Critical Shortage Facility Study

A two-year study was conducted at the Center for Health Workforce Studies at the State University of New York (SUNY), Albany, to identify the essential components of a comprehensive, national methodology for identifying facilities and communities with critical shortages of registered nurses (RNs). This study is ongoing. At the meeting, Ms. Jean Moore, Project Director, discussed the following aspects of the study:

- Background;
- Study approach;
- Study progress; and
- Preliminary update.

Background

There are continuing general shortages of RNs across the country. These shortages are attributed to declining enrollments in RN education programs and to RNs—young RNs, as well as retirees—leaving the workforce. Since 1996, the number of RNs per capita in the U.S. has decreased as the supply of RNs has grown more slowly than the U.S. population. In part, as a result of this shortage, the number of projected RN job openings from the present until 2010 is more than 1 million. The National Center for Health Workforce Analysis predicts that the RN shortage will grow from an estimated 6 percent in 2000 to an estimated shortage of 20 percent in 2020.

Another issue is the lack of ethnic diversity in the nursing workforce. While foreign-trained nurses appear to contribute substantially, in many cases these nurses are not culturally competent for the populations they serve. For example, most foreign-born nurses in New York City are from the Philippines, but a plurality of Asians in New York City are Chinese.

Initiatives administered by the Federal government to address the shortage include programs and policies to increase the pipeline to produce more nurses, improve retention, use RNs more efficiently, optimize immigration of nurses, and provide data about the workforce to inform policy decisions.

As part of this effort, in 2004, the Health Resources and Services Administration (HRSA) issued a Request for Proposals for a two-year research project to gather information and insights in support of the development of a new methodology for identifying health care facilities and communities with critical shortages of RNs. HRSA's decision to support this research was based in large part on their concern that its current method for identifying facilities and communities with shortages of RNs was too narrow in scope and that RN shortages were likely to worsen over the next 20 years. The New York Center for Health Workforce Studies at SUNY Albany was selected to conduct this study.

Study Approach

The primary goal of this study was to conduct research on the necessary components of a comprehensive, nationwide methodology to identify facilities and communities with critical shortages of RNs across the U.S. and its territories in order to target the placement of Federally obligated RN scholars and loan repayers. Key objectives of the study include:

- Identify and define indicators and measures that reflect critical RN shortages for the various types of facilities;

- Assess the availability of data sets that can be used to determine RN staffing needs nationally;

- Develop quantifiable key measures of nursing shortages based on key indicators described above as well as the available data sets that include the necessary data to calculate the key measures;

- Determine whether these key measures of shortage can be incorporated into a comprehensive national methodology to identify facilities and communities with critical nursing shortages based on the following criteria:

  - The measure accurately quantifies nursing shortages in a specific health care setting; and

  - The measure either can be calculated using an available national data set or the data can be collected and validated at the facility level;

- Establish an analytic framework that can be used for a comprehensive methodology to determine critical nursing shortages across a variety of health care settings.

The study was conducted under the guidance of four expert advisory panels, one for each of four types of health care organizations: hospitals, home health agencies, nursing homes, and public health agencies. Ultimately, this research will support the development of a comprehensive method for identifying the health care facilities and communities with critical shortages of RNs. This will permit more effective targeting of Federal and other resources to encourage service-obligated RNs to work in the facilities and communities with the greatest needs.

Study Progress

The panels' first meetings were in February 2005. Outcomes from the initial meetings included a set of guiding principles. A range of theoretical principles and ideals were developed. These are listed below:

- **Context: facility within community**. Both facility and community characteristics must be considered, but community characteristics are more important than facility characteristics.

- **Demand over need**. Analyses should primarily focus on employer demand for RNs (e.g., what the local labor market will actually support) rather than the health needs of the population. High-need areas that have no resources or infrastructure to employ additional RNs would find little benefit in the Nursing Education Loan Repayment Program (NELRP).

- **Identify standards for data**. Ultimately, it will be important to upgrade Federal, state, and local data systems to support better planning for the nursing workforce including the designation of facilities and communities with shortages of RNs.

- **Consider facility culture**. Some facilities may experience high RN vacancies not because of difficulties recruiting RNs, but because of persistent RN turnover due to problems of organizational culture within the facility (e.g., poor management). This is not a "shortage" issue, and the NELRP program is not intended to address such problems.

- **Define shortage based on outcomes**. Theoretically, a facility can be said to have "too few" RNs when there are not enough RNs for the facility to function effectively. This will be observed in certain outcome measures relating to quality of care and facility functioning.

The principles and ideals relating to practical concerns included:

- **Low administrative burden on facilities and HRSA**. Data used in the final methodology should not require a large-scale data collection or manipulation.

- **Applicable to all facility types**. The final shortage methodology should be applicable to and appropriate for all facility types.

- **Readily available data over time**. Ideally, the final methodology should be supported by existing data that are easy to access and available over time for updating.

- **Commonly accepted data elements and indicators**. Using established indicators of supply, demand, and shortage is preferable to developing new ones.

- **Easy to update to reflect changing environment**. Data used for identifying shortages should be easy to update so that designations can be periodically reexamined.

The principles and ideals relating to fairness included:

- **Attention to rural and urban differences**. The shortage designation method should not systematically disadvantage either rural or urban facilities.

- **Special needs of some facilities**. The shortage designation method should recognize extenuating circumstances (e.g., facing critical problems, serving special populations).

- **Case mix of patients**. The method should recognize that some facilities have higher patient acuity than others which may signify that some facilities require more intensive staffing.

- **Accommodate data manipulation**. The method should minimize opportunities for facilities and communities to "game" the system to achieve a shortage designation.

These guiding principles will influence the development of the methodology, but data availability will create some constraints. While finding the right indicators will be a key objective of the study, there are other important issues that will be more difficult to resolve. These issues include determining how shortage-facility designations will occur, how often designations will be updated, and how resources will be allocated by setting type.

Preliminary Update

While working on different options, staff considered the possibility of incorporating the HRSA Nurse Supply Model (NSM) and Nurse Demand Model (NDM) into the RN shortage designation process. Although the exact analyses included in the NDM could not be replicated at the county level due to data constraints, the basic logic employed in the NDM was very useful in thinking about demand for RNs.

The decision was made to apply a simplified version of the NDM logic to: 1) estimate health care utilization in different settings for counties (e.g., inpatient days); 2) estimate current national RN staffing by setting (e.g., RNs working in inpatient units); 3) calculate national RN staffing intensity for each setting (e.g., RNs per inpatient day); 4) apply national RN staffing intensity ratios to measures of utilization for each county; and 5) sum estimate demand for each setting to produce overall RN demand for individual counties. Each step is summarized briefly below.

1. Estimate Health Care Utilization

The data on county-level health care utilization came primarily from the Area Resource File (ARF). The ARF included data on short-term inpatient days (non-psychiatric hospitals); long-term inpatient

days (non-psychiatric hospitals); psychiatric hospital inpatient days; nursing home unit inpatient days (hospitals); outpatient visits (non-emergency); and emergency department visits.

The number of (non-hospital) nursing home residents in a county was obtained from the 2000 Census. This was based on the Census short-form data which is theoretically obtained from 100 percent of the U.S. population.

The number of home health patients per county was estimated using the age and gender distribution of the population, based upon national age-specific and gender-specific utilization rates from the Centers for Disease Control and Prevention (CDC).

Although this estimate was based upon population characteristics rather than actual use of services, home health patients by definition were receiving services where they live, so this was somewhat less problematic than estimating other types of utilization based upon population characteristics.

2. Estimate Current National RN Staffing

Data for current levels of RN staffing by setting were taken from the 2000 NSSRN, which included data on the number of RNs employed in the following types of care: short-term inpatient (non-psychiatric hospitals); long-term inpatient (non-psychiatric hospitals); psychiatric inpatient (non-Federal); nursing home unit (hospital); outpatient (non-emergency); emergency outpatient; non-hospital nursing home; home health; nurse education; public/community health; school health; occupational health; non-hospital ambulatory care; and other nursing care. These numbers were combined with the national utilization data described above to compute national levels of RN staffing intensity for the various types of care.

3. Estimating RN Demand by County

These national staffing ratios were then applied to the utilization rates for each county. For example, the national ratio was 4.97 RNs working in hospital inpatient units per inpatient day. If County A has 12,000 inpatient days per year, their demand for RNs in inpatient units is estimated at 59.6 (4.97 x [12,000/1,000]).

Overall RN demand for the county was obtained by summing RN demand in the county across all settings. (This procedure also opens the possibility of comparing setting-specific demand to setting-specific supply if data on RN supply by setting are available at the county level).

4. Use Supply of RNs to Estimate RN Shortages

RN shortages in each county were estimated as follows:

RN shortage = [Estimated Demand] – [Estimated Supply (adjusted for commuting)]

These raw shortage estimates were then standardized as a percent of demand.

This method has advantages over any of the other methods examined in this study especially in relation to the guiding principles initially proposed for the study. It uses nationally available data that is periodically updated, it uses actual health care utilization patterns by county, it accounts for multiple types of nursing care (including non-clinical services), and it accounts for differences in RN staffing intensity across settings.

The NDM uses factors such as HMO penetration and LPN staffing in regressions to adjust estimated staffing intensity and make it specific to each county rather than applying national ratios. A similar procedure might eventually be used to do the same thing here.

3. Nursing Workforce Diversity Program Exemplars

- Caring For Our Own Partnership
- Preparing the Next Generation of Nurses
- Pathways Into Nursing
- Success Pathways: Introducing Nursing as a Career Option

3. Nursing Workforce Diversity Program Exemplars

The Nursing Workforce Diversity Program Exemplars panel was convened to share successes and accomplishments of programs funded by the U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Division of Nursing to highlight successful examples of nurse education projects for individuals from disadvantaged and minority backgrounds. The four programs presented here are:

- Caring for Our Own Partnership (CO-OP);

- Preparing the Next Generation of Nurses (NGN);

- Pathways into Nursing (PIN); and

- Success Pathways into Nursing.

3.1. Caring for Our Own Partnership

Kathleen Chafey, PhD RN, Professor and Director, Caring for Our Own Program

Frederica Lefthand, M.S., Assistant Director, Caring for Our Own Program

Montana State University College of Nursing

Summary

The Caring for Our Own Partnership (CO-OP) was created after 20 years of trying to retain American Indian students at Montana State University (MSU) without success. It was funded in 1999 by the Health Resources and Services Administration (HRSA).

There is a critical need for American Indian Bachelor of Science (BSN) graduates to improve health outcomes for American Indians. To achieve this, the partnership proposes workforce diversity, culturally competent, sensitive care, and BSN opportunities for American Indian students.

Based on per capita income, unemployment, and percentage of families in poverty, American Indians are at the bottom of the economic ladder. There is no American Indian industry in Montana. Reservation unemployment is up to 70 percent. Approximately 25 percent of American Indian households do not have enough food to meet basic needs. The State has a commitment to American Indians in its constitution, but the education system has been unable or unwilling to commit resources to American Indian students.

There is a high American Indian student enrollment in 92 percent of schools identified for improvement. Additionally, American Indian students' test scores are below the 50th percentile on standardized tests, and almost half of all schools on or near reservations did not make adequate yearly progress.

American Indian students face many challenges including:

- College is not usually an expectation of American Indian students;

- More than 80 percent of American Indian students are the first generation to attend college;

- More than 90 percent of American Indian students come from reservation schools;

- American Indian students face emotional and social obstacles from both worlds;

- Students feel inadequate, lack confidence, and fear that instructors don't trust them or are "out to get them"; and

- Students have deficits in writing, math, and science.

In order to qualify for CO-OP, students must express commitment to the health care of American Indians. CO-OP develops a rapport with students, parents, health care providers, and advisors. The retention effort begins the first summer with an intensive three-to-four-week tutoring program. Additionally, in August there is a Bridge Program that addresses a range of topics to prepare students both academically and in other areas. For example, all students review study skills and time management. Also provided are academic previews of all courses and non-academic activities such as finalizing financial aid, housing, and child care.

Dr. Chafey and Ms. Lefthand recommended greater funding specifically for minority bachelor-level education for American Indian students. They urged committee members to review their literature on the program.

The National Advisory Council on Nurse Education and Practice (NACNEP) discussion on the presentation included:

- Students arrive either as freshmen or as transfers from tribal colleges. The retention program begins with recruiting by working with middle school and high school students on reservations, plus after-school activities.

- Regarding the American Indian student perception that faculty are "out to get them," the CO-OP initially planned standard cultural competence tests and discussions with faculty about improving teaching; however, a single approach could not be determined because there are American Indian students from many tribes with disparate cultures.

- To support these students to work through academic and student life challenges, CO-OP managers talk about the CO-OP being "family away from family." The important point is to let students know they will be supported.

- Among the graduates, many have volunteered to counsel undergraduate students in the program.

Caring for Our Own Partnership

Kathleen Chafey, PhD RN, Professor and Director, Caring for Our Own Program

Frederica Lefthand, M.S., Assistant Director, Caring for Our Own Program

Montana State University College of Nursing

Introduction

Recent national studies have concluded that increasing the number of minority health professionals in the health professions workforce is a key strategy in addressing serious and persistent disparities in the health and health care of minority members of the population. The percentage of the registered nurse (RN) workforce appears adequate relative to the U.S. population of American Indians. However, in areas of the country where there are significant numbers of American Indian people (6.5 percent of Montana's population, for example, according to the U. S. Bureau of the Census, as compiled by the Census and Economic Information Center, Montana Department of Commerce, 2001) and where there is a virtual majority in counties that contain large reservations, American Indian nurses are seriously under-represented. Furthermore, American Indian nurses have the lowest percentage of graduates with baccalaureate degrees and are among the least likely to have master's or doctoral degrees. For health and illness care, American Indians depend primarily on Indian Health Service health professionals who are largely from other, non-American Indian cultures. If the goals of Healthy People 2010 are to be realized, there is, and will continue to be, a critical need for more American Indian graduates of baccalaureate and higher degree programs who can help improve health outcomes. American Indian graduates so prepared will provide greater access to high quality, culturally competent, and sensitive health care and leadership in changing the care environment for their own people.

The purpose of the Caring for Our Own Program (CO-OP) at Montana State University (MSU) is to increase nursing education opportunities for American Indian students who wish to pursue a university education in nursing. The project has been made possible through support from the Division of Nursing Workforce Diversity Program. The purpose of this paper is to outline the successes and challenges encountered in recruiting and retaining American Indian students through graduation and licensure. This paper will focus special attention on career awareness and school persistence activities with middle and high school youth and will conclude with observations and experiences that the National Advisory Council on Nurse Education and Practice (NACNEP) may wish to consider in its future policy deliberations.

Context for the CO-OP Program

The following data provide the contextual background from which CO-OP students are recruited with regard to:

- Economic disparities;
- Health disparities; and
- Educational disparities.

Economic Disparities

According to most economic indicators, Montana lags behind the rest of the Nation. For *all* economic indicators, Montana's American Indian people lag behind the State as a whole and are far under norms for the Nation as a whole. With respect to per capita income, unemployment, percent of families in

poverty, the plight of single moms, and students needing food supplements, American Indian people are at the bottom of the economic ladder. In addition, unlike other states with high concentrations of American Indian people, there is no American Indian gaming industry in Montana so that without education and the prospect of new reservation industries, there are currently few prospects for economic improvement.

Per capita personal income in Montana for 2003 was $25,775, fourth from the bottom among all states. Nearly 20 percent of youth (age 17 and younger) were living in poverty in 2003. With respect to average annual pay ($26,000 in 2002), Montana ranked last among the 50 states. The income and employment picture for American Indians is quite different than that of Montana as a whole. For example, the median income on Montana reservations was $9,600 per year and 2000 census data showed that 31 percent of American Indian families on Indian reservations served by the proposed project had incomes below the poverty line compared to 10.5 percent for Montana as a whole. There is no American Indian gaming industry in Montana, and the 2000 annual per capita income on American Indian reservations ranges from $7,736 on the Northern Cheyenne reservation (with a median household income of $23,679) to $14,503 on the Flathead reservation where 91 percent of the people are Caucasian, non-Hispanic. In 2003, the unemployment rate ranged from a low of 11.6 percent to 58 percent compared to the overall Montana rate of 4.2 percent. The State of Montana reports an average unemployment rate for Montana reservations of 11 percent. According to the Bureau of Indian Affairs, however, the unemployment rate on reservations is much higher. The cost of one year at the university is approximately $12,000 for tuition, fees, room, board, and books. Given this cost, without financial incentives, staff support, and assistance made possible by programs such as the Workforce Diversity Program, few students would even consider a university education in nursing.

Health Disparities

In a state that is among the poorest in the Nation, over half of the 52,000 American Indians in Montana live primarily on tribal lands and confront serious and persistent health problems as well as economic and social deficits. The most prevalent health problems are complex and vary by Indian Health Service (IHS) areas and from reservation to reservation within those areas. A closer examination of the health disparities underscores the need for high quality, culturally-competent nursing care for this underserved population. Poor health and chronic, disabling conditions are linked to poverty and unemployment; inadequate nutrition, education, and housing; alcohol, tobacco, and drugs, particularly methamphetamine. In addition, many American Indian people, especially in the West, live in isolated rural areas where great distances, weather, lack of transportation, and few telephones prevent ready access to health care. Children and youth are particularly vulnerable to health problems linked to poverty, isolation, and lifestyle, especially poor nutrition, food insecurity, and, in many cases, hunger. The U.S. Department of Agriculture found that 22.2 percent of American Indian households were food-insecure (meaning they did not have enough food to meet their basic needs) during the period from 1995 to 1997. They also found that one out of twelve households experienced food insecurity with hunger in the same period. For American Indians in Montana in 2002, including both sexes and all ages, the leading causes of death (stated as percentages of total deaths) included: cancer (20 percent), accidents (18 percent), and heart disease (16 percent).

- Deaths of males accounted for 65 percent of the deaths from heart disease, 47 percent of the cancer deaths, 58 percent of the motor-vehicle accidental deaths, and 63 percent of non-motor vehicle accidental deaths.

- "Unintentional injuries" (including motor vehicle and other accidents) was the leading cause of death in every age category from age 5 to age 44 for Montana American Indians, for both sexes in 2001.

- Infant mortality (2003) for American Indians (including Aleuts and Eskimos) showed an alarming 7.8 percent increase between 1995 and 2001. The rate for 2001 was 9.7 per 1000 live births for this population compared with 6.7 per 1000 live births for the United State (all races). Additional data on infant mortality revealed that:
  - In the Aberdeen area of the Indian Health Service (Eastern Montana/North and South Dakota/Nebraska) it is estimated there are 17 deaths per 1,000 live births.
  - For American Indians 25 percent of the elevated infant mortality rate has been attributed to Sudden Infant Death Syndrome (SIDS).
  - Maternal smoking has also been linked to adverse birth outcomes and in Montana, approximately 42 percent of all American Indian adults smoke (double the prevalence rate of 21 percent for all Montanans).
- In 1995, life expectancy at birth (Billings Area IHS) was 67.2 for both sexes compared to United States (all races) of 75.8.
  - The median age of death for American Indian women was 65, for all other women, it was 81.
  - The median age of death for American Indian men was 57; for Caucasian men, it was 75.

Educational Disparities

Montana has a significant population of minority, rural, underserved, and profoundly disadvantaged students. In order to make a major impact on the workforce of American Indian nurses and to increase and enhance the pool of future applicants, there needs to be major attention given to educational inequities that characterize reservation and near-reservation schools and that create barriers for their graduates. The learning environment for students living on or near reservations, coupled with poverty and cultural barriers, makes a college education difficult to attain. Educational attainment of Montana American Indian students lags far behind other groups in Montana, as described in part in the latest 2003-2004 American Indian Education Data Fact Sheet from the Montana Office of Public Instruction:

- 11 percent of Montana's school age (K-12) population was American Indian.
- 92 percent of schools identified for improvement had high numbers of American Indian enrollments.
- 60 percent of students in schools on or near reservations are eligible for free/reduced lunch (compared with the Montana rate of 35 percent).
- The American Indian high school dropout rate is steady, whereas the overall dropout rate for Montana high schools has been declining.
- Test scores for American Indian students have typically ranked below the 50th percentile on standardized tests.
- 49 percent of all schools on or near reservations did not make Adequate Yearly Progress (AYP).
- Given the median household income on Montana reservations relative to the annual cost of in-state tuition and fees at MSU ($12,000 per year), it is not surprising that without financial incentives and staff support made possible by programs such as Workforce Diversity, few students would aspire to a university education in nursing.

In October 2004, a summit hosted by the Office of Public Instruction brought together nearly 200 educators and community leaders to help develop an action plan to eliminate the American Indian student achievement gap. However, the poverty and unemployment that plagues reservation

communities is also reflected in lower funding levels for schools and low teacher salaries. The Montana constitution is unique among states with sizable American Indian populations in terms of its constitutional commitment to American Indian education: "It is the goal of the people to establish a system of education which will develop the full educational potential of each person. Equality of educational opportunity is guaranteed to each person of the state. The state recognizes the distinct and unique cultural heritage of American Indians and is committed in its educational goals to the preservation of their cultural integrity." Unfortunately for Montana students, the resources needed to ensure quality education for American Indian students have not followed the commitment, and low high school graduation rates preclude positive economic growth.

Challenges in Recruiting American Indian Youth

To achieve the project's purposes, CO-OP staff and members have had to work within both the university community and reservation communities to overcome negative attitudes about the feasibility or desirability of American Indian students completing a university education. A major focus of our efforts is to help students and their families cope with the realities of living in two worlds. These students do not simply leave home and move on with their lives to attend college like thousands of majority students who have the expectation of a college education since childhood. Attending college and preparing for college is a foreign concept for many of these students and their families. Baccalaureate preparation for nurses requires leaving the reservation and families, often for several years; university education has been considered "too hard," "too expensive," and former students have shared many incidents of racism in off-reservation towns and even in the classrooms of the university. Nursing students in previous generations report being told "American Indian students could not make it in nursing" by teachers and advisors, and these experiences have been shared with others in their communities.

Finally, as in many other rural, isolated communities where higher education is not necessarily valued or supported, those who choose to leave the reservation to pursue careers requiring higher degrees may be discouraged by family who do not want them to leave. Peers who choose not to go on to college, or even finish high school, may also communicate to the college-bound student that he or she is "wasting time and money" or even that the college-bound student thinks himself or herself "better than" those who choose not to leave the reservation. These students often hear remarks such as: "you think you're better than us, just because you go to college," or "she acts like a white girl because she's in college," or "don't you know where you belong?" Sometimes the rigors of academic life become particularly burdensome, or students experience racism in the classroom or in a clinical setting. When this happens, the students may feel compelled to return home. Consequently, students often respond to difficult situations with comments like "maybe I don't belong here" or "maybe I would have been better off just staying home" and "my mom told me not to come here."

The success of this project in overcoming barriers to recruitment and retention is attributable in part to the lengthy partnership-building that took place prior to applying for HRSA funds. CO-OP staff initially worked, and continue to work, with tribal stakeholders on three Montana reservations to promote career opportunities in nursing and the development of awareness, motivation, and confidence that a university education in nursing was valuable, achievable, and affordable for reservation youth. CO-OP staff members have made connections with school children and youth, their parents, teachers, and counselors to build a sense of trust that staffers will shepherd their students through the college experience. Tribal leaders have been recruited, including educators and health professionals on the reservations who agreed to serve on reservation-based advisory boards. Board members have been generous in their support, helping by sharing their perceptions of this program in their communities, and identifying and mentoring interested prospective students beginning with middle school youth.

High school students and tribal college transfers are encouraged and tribal colleges assisted in the application process and in securing tribal funding.

By creating opportunities for individual American Indian students, the project has contributed to the supply, distribution, diversity, and quality of the health care workforce accessible to rural underserved populations. It has also helped build a pipeline reaching to students now in elementary school. The CO-OP now has tribal networks for student recruitment and support in seven reservations (six in Montana and one in Wyoming). The project's recruiter (a member of the Crow Nation who is also the Assistant Project Director) travels thousands of miles each year across Montana and Wyoming. Many hundreds of contacts are made each year with middle- and high school students, counselors, and parents attending career fairs, health fairs, Pow Wows, and even basketball tournaments. The CO-OP staff play host to numerous busloads of students on field trips to the university and organize summer activities for prospective students as well as after-school health professions career nights to encourage persistence in school and pursuit of a college-prep curriculum.

As a result of effective partnering and recruiting, the number of American Indian majors in nursing has grown from 14 when the project began in 1999, to 39 in the fall semester of 2004. The number of prospective students—graduating high school seniors who have declared their intention to attend MSU and major in nursing—has increased from 29 in 1999, to 74 in 2005.

Challenges in Retaining American Indian Nursing Students

Educational achievement of Montana's Indian youth lags far behind other groups in Montana as noted above. Lack of educational preparation, motivation, and financing for higher education help to explain why American Indians represent only 2 percent of the total student population at MSU, well below the representation of American Indians in the general population (6.5 percent). In the College of Nursing, on the other hand, American Indians now comprise 5 percent of the student population and the percentage is growing. The HRSA Nursing Workforce Diversity Project has made it possible for the CO-OP program to help students confront and overcome educational deficits that posed insurmountable barriers in earlier years.

During the first five years of HRSA funding, the College of Nursing graduated 22 American Indian students, twice the number who graduated in the 5 years prior to grant funding. All but one has passed the national licensing (NCLEX-RN) examination on the first attempt and has moved into the professional nursing workforce. It should be noted that over 80 percent of our students are in the first generation of their families to attend college and over 90 percent of our students graduate from reservation high schools. These students often come with deficiencies in academic subjects such as writing, math, and science, but also often lack experience writing papers, doing homework, and taking tests. For most, however able they are, the adjustment to academic and social life hundreds of miles from home is a difficult, and sometimes impossible transition.

We believe that retention efforts must be implemented early, beginning with emphasizing school persistence and academic focus by middle school children. In other words, the recruitment component of the program includes laying the groundwork for retention, regardless of whether or not students ultimately declare nursing as a major. Minority college students are most vulnerable during the first year when they are trying to adjust to the multiple dimensions of college life. The more we can do to prepare them for this transition, both academically and socially, the greater will be the likelihood that the retention program will succeed.

Once students are accepted to the university and the CO-OP program, the college retention program begins with a three- to four-week intensive review of writing, math, and science concepts during the summer between high school and the freshman year for new students. Following the end of the new

student summer intensive, all students—freshmen, transfers, and continuing students—complete a one-week bridge program to review study skills and time management concepts, prepare for the new school year, finalize financial aid, housing and child-care arrangements, develop class schedules, and purchase books. During this period, new students are also introduced to academic coursework at the university, sample courses such as anatomy and physiology using the cadaver lab, and become familiar with medical terminology and health assessment with continuing students acting as mentors. Because these preparatory programs are outside the regular semester calendar, we have also begun a "mini-bridge" between semesters to allow students to work in group tutorials to help them prepare for the courses they will be taking in the second semester.

All students are expected to achieve a 2.50 grade point average each semester in order to be eligible for a stipend the next semester. All students are placed on an individualized academic contract that:

- Requires attendance at all classes;

- Requires they spend two hours of supervised study time for every hour they are in classes or labs;

- Requires attendance at all tutoring sessions whether individual or group;

- Requires they attend two hours of CO-OP seminar per week; and

- Requires attendance at an intensive two-day NCLEX preparatory program once during the junior year and again during the senior year.

The CO-OP program, for its part offers each student:

- An individualized plan for tutoring based on the student's grades in previous classes and other indicators of confidence and comfort with the courses on the schedule (generally, new students are assigned to tutorials in every required class and these tutorials are offered one or two hours per week, more if needed);

- Help with non-academic issues that interfere with academic achievement (this includes housing, child-care, financial aid counseling, referrals for personal counseling and career counseling, and assistance arranging summer employment, internships, job shadowing, and contact with nurse mentors on partner reservations); and

- Help for American Indian students by CO-OP staff members to deal with the demands of living in two worlds by becoming the student's family away from their family.

This last point is perhaps the most important retention strategy we offer. The CO-OP program refers both to American Indian nurses caring for their own people but also caring for our own (American Indian) students. As mentioned before, it is usually very difficult for our students to leave their reservations. Over 80 percent are the first generation in their families to attend college. Several of our students come from traditional backgrounds in which attending ceremonies and other cultural events are extremely important. American Indian people value having strong family and extended family support. The bigger a family is, the wealthier a person is seen to be. Through the development of the CO-OP "learning community," staff and peers soon become part of the student's extended family. The program helps bolster the student's self-esteem and confidence to enable them to do the work needed to complete their degrees.

The final component of the retention program is to help the student who, for whatever reason, must withdraw from the program. We know that nursing is not for everyone, nor perhaps is a college education. However, we want the withdrawing student, insofar as possible, to have positive feelings

about the college experience and their own efforts. We want the students to return if and when they can; if they cannot, we hope they will refer others to the program.

Summary of Progress, 1999 to 2005

The CO-OP project began in 1999 with three reservation partners and six new American Indian students who joined the eight American Indian students already in the nursing program. The aim of the project was to address low enrollment and graduation rates of American Indian nursing students. Since the project foci include building enrollments and graduation rates and increasing cultural competence of students and faculty, funding for the program was sought after grassroots support was built for the program on the part of stakeholders on the reservation and the College of Nursing faculty and the administration. Highlights of accomplishments include the following:

- Twenty-two students have graduated from the program to date. Most are practicing in rural communities and/or with underserved populations;

- CO-OP enrollment has increased from 14 American Indian students in the fall semester of 1999 to 39 students in the fall semester of 2004, a 178 percent increase;

- In 1999, American Indian students made up 2.8 percent of College of Nursing enrollments. In the fall semester of 2004 American Indian students made up 5 percent of enrollments, and first-time American Indian students made up 9.8 percent of the entering cohort of students;

- In March 1999 (just before the start of the program) there were 26 students on the MSU prospective American Indian nursing students list. In March of 2005 there were 74 prospective students;

- The current average grade point average of all CO-OP students is 2.69;

- In the last three years, three CO-OP students (graduating seniors) have earned straight A averages and two students have been named College of Nursing Student of the Year;

- All but one of 22 graduates since 1999 has passed the RN licensing exam on the first attempt;

- One graduate will enter graduate school (Ph.D.) in the fall semester 2005 and will work part-time as a CO-OP staff member in a faculty role;

- Three key CO-OP staff members are enrolled members of Montana American Indian tribes as is a fourth part-time staff member who assists with pre-entry activities and outreach; and

- One CO-OP staff member (a member of a Montana American Indian tribe) began junior level coursework in nursing in the fall of 2005.

Policy Implications

In the Third Report to the Secretary of Health and Human Services and to the Congress, the NACNEP reaffirmed its goal that "by 2010 two-thirds of the RN workforce should have at least a baccalaureate degree and to help those eligible to become faculty members…" (National Advisory Council on Nurse Education and Practice, 2003). As evidenced in peer reviews for Nursing Workforce Diversity grant applications, it is the author's impression that the pressure to increase the size and diversity of the workforce has resulted in a proliferation of applications for career ladder programs that too often end with associate degrees. In addition, too often these applications seem to emphasize recruitment. Pre-entry activities are often composed mainly of the administration of batteries of tests, and/or the retention program depends heavily on peer mentoring with little meaningful faculty involvement. Given the challenges described above and through the lens of our own experience, the staff of the CO-

OP program would recommend that greater funding be allocated *specifically* for baccalaureate education, *specifically* for minority students for the following reasons:

- Meaningful and successful education of minority students in baccalaureate programs is an expensive, staff-intensive, and lengthy process when compared to associate degree programs. Yet, to address effectively the serious and persistent disparities in the health and health care of minority members of the population, we need to make it possible for minority students to have a comprehensive university experience that emphasizes the goal of *educating*, not just graduating.

- For American Indian nursing students, higher education must take into account their "two worlds" perspective. Quoting American Indian educator Ardys Bowker:

    We must redefine Indian education from the perspective of Indians. We must develop an educational program that gives meaning to our lives as Indians and to our culture while at the same time instructing students in the underlying ideas of the American culture and providing the intellectual tools needed to survive in a contemporary, global society.

    This assessment fits well with what we are trying to accomplish in the CO-OP program. Given the health profile of American Indian people, there is a tremendous need for nurses and nurse leaders whose knowledge and practice of nursing is built on a solid foundation of sciences and humanities.

- Nationally, the nursing workforce needs not just more nurses, also but more competent practitioners and leaders who come from diverse populations. Schools of nursing need minority faculty with advanced degrees who can help address health care issues of minority patients, provide role models for minority students, and teach other faculty and students cultural competence. University education is an expensive investment that can yield enormous returns.

Especially for American Indian students, university education is a costly investment but the students can benefit enormously. If our workforce diversity programs can successfully foster the social and intellectual growth of students, we will truly be caring for our own for decades, even generations to come. Thank you for your continuing investment in the ideal of diversity.

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3.2. Preparing the Next Generation of Nurses

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Summary

Clayton College and State University (CCSU) (soon to be Clayton State University) is a small university just south of Atlanta. With 6,000 students, Clayton has the highest minority representation in Georgia except for Historically Black Colleges and Universities (HBCUs). In total, there are currently eight projects in HBCUs, eight in minority-serving institutions, and two in tribal universities.

The three major objectives of the Next Generation of Nurses (NGN) project are:

- Develop pre-entry preparation for high school juniors and seniors and college freshmen and sophomores;

- Develop focused retention efforts for enrolled junior and senior nursing students; and

- Provide student stipends to support financially disadvantaged students.

The efforts of the project counselor and the liaison to the Center for Academic Assistance who worked with NGN students have been successful. There are also plans for a nursing forum in the summer of 2005 and forum members have been identified. The forum provides an opportunity for students to be exposed to nurses and the profession.

The pre-entry preparation for high school students made it easy to devise individualized study plans and included a national speaker who has developed an instrument to measure cultural competence. Among the impacts were post-test SAT scores ranging from 790 to 1,050 with 53 percent of the students scoring high enough to be admitted to CCSU.

Retention efforts for enrolled juniors and seniors included two seminars by Dr. Ora Strickland to develop nursing faculty for the mentor role and stipends for both students and faculty. In 2003, there were eight faculty members (mentors) for 19 students, and in 2004, there were nine faculty members (mentors) for 33 students. Parents were also invited to sessions to obtain their support.

Among the lessons learned were that:

- Minority and disadvantaged students can be successful;

- Flexibility and adaptability are necessary; and

- Faculty development in cultural competence and mentoring is vital.

Preparing the Next Generation of Nurses

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Preparing the Next Generation of Nurses

Preparing the next generation of nurses is a challenge for nurse educators especially for those who also want to increase nursing workforce diversity. The admission standards and competition for limited slots in nursing programs sometimes inhibits minority and disadvantaged students from being accepted. One way to meet the challenge is for nurse educators to provide pre-entry academic enhancement programs for minority and disadvantaged students interested in nursing as a career. The purpose of this article is to discuss a project entitled "Preparing the Next Generation of Nurses (NGN)" at Clayton College and State University (CCSU), which is one approach to increasing nursing workforce diversity.

CCSU is a senior institution of the University System of Georgia educational consortium that is governed by the Georgia Board of Regents. The University is located in Morrow, Georgia within Clayton County. CCSU's core mission is to prepare students to succeed in the workplace of the 21st century and to provide services and continuing education that will improve the quality of life for residents of the Southern Crescent, the State, the Nation, and the world. Currently, CCSU enrolls over 5,900 students and offers majors that include Applied Biology, Teacher Education, Nursing, Health Care Management, Dental Hygiene, Psychology and Human Services, Music, and Technology Management, among others. In 2004, 62 percent of the CCSU students were from minority ethnic groups with a breakdown of 48.9 percent African-American, 6.5 percent Asian/Pacific Islanders, 6.6 percent all other (Hispanic, multiracial and American Indian) and 38 percent Caucasian. The diversity of the CCSU student body closely reflects the changing population of its county service area. One-third of the students at CCSU are under 22 years of age with a median age of 28. In 2004, U.S. News & World Report ranking of colleges identified CCSU as having the most diverse student population among comprehensive baccalaureate-level colleges and universities in the southeastern U.S. other than historically black colleges. Clearly CCSU is positioned well to enroll diverse students.

Several factors are important in the consideration of the need for a project such as the national nursing workforce. At the national level, the Bureau of Health Professions has established an outcome to increase the number of minority/disadvantaged graduates and/or program completers. Data from the National Sample Survey of Registered Nurses – March 2000 shows that 86.6 percent of the registered nurse population was non-Hispanic Caucasian, while 13.4 percent were from underrepresented minorities (4.9 percent non-Hispanic Black, 3.5 percent Asian, 2.0 percent Hispanic and 0.5 percent American Indian) (Bureau of Health Professions, Division of Nursing, 2000). These numbers compare poorly to the U.S. population as a whole where 75.1 percent are non-Hispanic Caucasian, 12.3 percent are Black or African American, 0.9 percent are American Indian, 3.6 percent are Asian, 5.5 percent report some other race and 2.5 percent report two or more races (Georgia Health Workforce Cooperative, 2002).

In 1996 Georgia reported 712.5 RNs per 100,000 population. This number fell significantly below the national average of 797 RNs per 100,000 population (Bureau of Health Professions, Division of Nursing, 2000). Georgia actually ranks 43rd of the 50 states for RNs per population. Other data from

the National Sample Survey of Registered Nurses – March 2000 suggests that the number of employed nurses per 100,000 population has now fallen to 683 although the overall rank has not changed. In 2005, the statewide vacancy rate for RN positions was 13 percent. In the Atlanta metropolitan area the vacancy rate has already topped 15 percent.

In addition, there is a projected need for increased RN employment of 38.9 percent versus the national growth in RN employment opportunities of 20.9 percent (Georgia Health Workforce Cooperative, 2002). Georgia's RN workforce is also aging. In 1988, 51 percent of the RN workforce was over the age of 40. In 1996 that number had increased to 62 percent. The average age of practicing nurses in Georgia is now 45, again greater than the national average age of 44 (Bureau of Health Professions, Division of Nursing, 2000).

There is also limited diversity among registered nurses providing health care to Georgians. Eighty-two percent (50,659) of the RNs are Caucasian, 15 percent (9,141) are African-American and 3.5 percent represent other minorities (Georgia Health Workforce Cooperative, 2002). Hence, the number of minority registered nurses in the state is less than half the percentage of the minority population as a whole. Clearly the need exists for a more diverse workforce to meet the needs of Georgia's citizens.

The goal of the NGN project at CCSU is to increase the number of minority and disadvantaged students able to enroll in and complete a baccalaureate nursing program. The project has a three-fold approach:

- Pre-entry preparation for high school juniors and seniors and college freshmen and sophomores;
- Focused retention efforts for enrolled junior and senior nursing students; and
- Student stipends to support financially disadvantaged students.

There are four specific components of the project:

- The Academic Enhancement Program and the math and science camp for high school students;
- Academic Enhancement Program for pre-nursing university students;
- Retention efforts for university nursing students through the NGN mentoring program; and
- Student stipends awarded for participation in the NGN programs.

The pre-entry preparation for high school students includes a summer math and science camp and academic enhancement activities during the school year. Key stakeholders in the high school program were the project counselor who was a liaison with four Clayton County high schools and the project liaison to the Center for Academic Assistance at CCSU. Seventy high school students participated in the camps the first two years of the project and 25 were recruited for summer 2005. The camps were held on campus with collaboration from math and science faculty who prepared many hands-on activities for the students including making ice cream. In addition, a CPR course was provided for the students. A cookout was the finale of the camps at which time the students received a certificate of participation and their stipend checks. The NGN academic enhancement program follows the summer camps during the school year.

The NGN academic enhancement program consists of collaboration with the Center for Academic Assistance (CAA) at the University, diagnostic testing in math, reading comprehension, language, writing, use of SkillsBank 5 (a computer tutoring program) peer tutoring, and study time. The high school students came to the university's CAA. The students typically reported enjoying being on a university campus and having a quiet place to study.

The summer camps had a positive impact on the high school students both academically and socially. The hands-on activities helped the students to master science concepts needed for future careers in health care. Many participating high school students indicated in focus groups that being on a university campus helped them to get an idea of what to expect when going to college, and they also thought it would help them make the transition from high school to college easier.

The impact of the pre-entry preparation for high school students was evident in improved high school progress reports, admission to various universities, and improved SAT post scores. The students' SAT scores ranged from 790 to 1050; CCSU requires scores of 400 on the math portion and 430 on the verbal portion. Over half of the students scored high enough on the SAT to be admitted to CCSU. Those who did not score high enough in both the math and verbal sections did have scores high enough in one category. The scoring and entrance requirements on the SAT may change with the new SAT format currently being administered.

Preparing university pre-nursing students is essential in trying to increase the number of minority and disadvantaged students entering the CCSU nursing program. The NGN pre-nursing information sessions are a way to better educate students about nursing as a career. Members of the Student Nurses Association (SNA) encourage students interested in nursing to join the local chapter that costs $8 and consider state and national membership. Membership in SNA is open to all university students and is not limited only to nursing students. Participation in SNA provides networking, information about the nursing program, and socialization into the profession of nursing. Peer tutoring is available in the Center for Academic Assistance, and SkillsBank 5 is also used for diagnostic testing and tutoring in identified academic areas that need strengthening.

The impact of the pre-entry preparation for university students is clear in that it increases participants' understanding of nursing as a career, enhances their academic skills to increase the probability of being admitted to the nursing program, provides socialization into nursing, and increases their understanding of the rigor of a nursing program. One student in the NGN program who was enrolled in the nursing program commented that even though the grant team prepared her for the rigor of the nursing program, it was harder than she expected and she was glad to be forewarned.

When the project team considered retention efforts for the minority and disadvantaged students in the nursing program, we believed we had to begin with faculty. Prior to beginning this mentoring program, Dr. Ora Strickland, a nationally known speaker, provided consultation on developing nursing faculty for the mentor role. She presented two seminars on mentoring, and the faculty evaluations were positive. The NGN mentoring program consisted of eight faculty (mentors) and 19 students (mentees) during spring, summer, and fall semesters 2003 and nine faculty (mentors) and 33 students (mentees) during spring, summer, and fall semesters 2004. Both students and faculty received stipends. The NGN mentoring program was designed for the mentor/mentee dyads to meet weekly and agree on common behaviors. For example, each mentee who failed a quiz or test had to notify his/her mentor within one week with a plan for improvement and had to keep a journal of individual progress. The mentors worked with their mentees to develop study strategies that were congruent with individual learning styles. Also, the mentors kept a log of weekly activities. The students (mentees) evaluated the program and shared that it was a significant and meaningful part of their academic achievement as well as their socialization into nursing. The faculty evaluations of the program were also positive, noting mentors received personal satisfaction in the accomplishments of their mentees.

The impact of the retention efforts of nursing students was apparent in different ways. The first group of NGN students (mentees) graduated in spring 2004. The project helped all students pass both the ERI National Standardized exit exam required in the nursing program and the National Council of Licensing Examinations (NCLEX) on their first attempt. In December 2004, all but one student passed

both the exit exam and the NCLEX on the first attempt. The one student who did not pass the exit exam on the first attempt, passed it on the second attempt and had another opportunity to sit for the NCLEX. Additional students still in the nursing program are progressing toward graduation, and another group will graduate in spring 2005.

Student stipends were provided to eligible high school students, pre-nursing university students, and junior and senior nursing students. They received $250 a month if they attended all activities. Their stipends were decreased if students did not put in the required hours or attend the scheduled activities. Records were kept on all students receiving stipends and the amount received. Since the beginning of the project, a total of nine faculty members and a total of 102 high school and university students have received stipends.

The impact of the student stipends was threefold:

- Stipends were a motivating factor in student attendance and participation in the NGN activities;

- Stipends helped meet financial needs of disadvantaged students; and

- Stipends helped some students decrease their work hours and spend more time on school work.

Participants who received stipends acknowledged their appreciation of the funds and many university students used them for continuing school expenses. Students in a focus group indicated that they would participate in the NGN program even if there were no stipends because of the benefits received.

Administering the NGN project brought a greater understanding of minority and disadvantaged students, the need to be able to respond to unexpected events, and the importance for faculty development and future grant-writing. This project showed that minority and disadvantaged students are capable of enrolling in and successfully completing a nursing program and passing the NCLEX exam, leading to a more diverse nursing workforce.

The scope of the project was larger than anticipated, the planning period took longer than anticipated, and more manpower was needed to implement the project activities. The project team also learned the importance of team work and the need to be flexible and adapt to unexpected events, such as the delay in getting started because of the inability to hire a project counselor in the time allotted. Faculty development in cultural competence and mentoring is vital when working with minority and disadvantaged students to assist them in achieving their full potential. A major lesson learned from this project relates to future grant writing and the need to expand the personnel needed to accomplish a large-scale project and include more faculty release time.

The project team had several recommendations for successful recruitment and retention strategies aimed at minority and disadvantaged students. To enhance the pool of minority and disadvantaged students, education about nursing and other health care fields must begin in elementary, middle, and high school. Pre-nursing academic enhancement programs will help these students be competitive in the admission process to nursing programs. Faculty in schools of nursing need to demonstrate a passion for interacting with minority and disadvantaged students, including a willingness to take the extra time needed to work with these students. In addition, faculty development in cultural competence and mentoring provides the underpinnings for faculty to best enhance the academic performance of this population. Mentoring is an excellent method to enhance the success rate of minority and disadvantaged students in nursing programs. Another important aspect of retaining this population of students, once they are enrolled in nursing programs, is to implement a tracking system to monitor their achievements and plan appropriate interventions if they encounter academic difficulties.

This project has helped minority and disadvantaged students successfully enroll in and complete a baccalaureate program in nursing, thereby contributing to HRSA's goal of increasing the diversity of the nursing workforce. As such, HRSA should continue to provide funding for the Nursing Workforce Diversity Program.

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3.3. Pathways into Nursing

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Retention Specialist, Pathways Into Nursing

Valencia Community College, Orlando, Florida

Summary

Dr. Linda Speranza introduced the Pathways into Nursing (PIN) project on the four campuses at Valencia Community College in Orlando, Florida. Orlando is a large city with a growing population of more than one million. The college president is very supportive of the PIN project. The award-winning program has established partnerships with three high schools. The program focuses on increasing representation of Hispanics, African Americans, and American Indians in colleges.

Students in grades 10–12 were selected as PIN targets; criteria included grade point average (GPA), interviews (two with teachers or counselors), a writing sample, and college placement tests. Despite the predictions of lower numbers by Valencia's advisory council and an initial goal of 15, there were more than 100 applicants during the first year. Fifty-three applicants were selected in the inaugural year; seventy-four were admitted the second year and 108 in the third year. The ethnic mix of Hispanic, Asian, disadvantaged Caucasian, and African-American students has been stable over the three years. Several males are enrolled in the program; currently six men are participating. Advertisements in local Spanish and English newspapers are used as a recruiting tool.

The core team consists of two full-time staff, three part-time educators, and two registered nurses (RNs). One RN is a clinical nurse specialist. The second RN is a baccalaureate-prepared nurse who is currently teaching at the same high school from which she graduated. There is also a physician from Venezuela on the team. Faculty and staff are encouraged to participate in a Hispanic Month and an African American Month. One-to-one mentoring is provided by the part-time educators. The college has a tutoring center with instructors strong in math and English (bilingual).

PIN students have excelled in College Placement Tests (CPT), reducing the need for college remediation courses, and current Valencia nursing students have bridged the gap through mentoring as PIN Pals. Nursing scholarships have allowed students to concentrate on grades, maintaining high GPAs. Many of the PIN students volunteer their time in local nursing homes and other health facilities because they have nurse's aid experience.

Pathways into Nursing

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Retention Specialist, Pathways Into Nursing

Valencia Community College, Orlando, Florida

Pathways Into Nursing (PIN) is a Health Resources and Services Administration (HRSA) grant awarded to Valencia Community College in Orlando, Florida from July 2002 to June 2005. Valencia Community College serves over 54,000 students annually from the Orange and Osceola counties in the service area of central Florida.

The Valencia Community College Nursing Program started in 1974 and has traditionally accepted 168 nursing students per year. In view of the national nursing shortage, PIN has been an important contributor to building Valencia's nursing student enrollment up to the current status of admitting 350 nursing students per year. In addition to meeting demands for nurses in the Central Florida area, Valencia has increased its service range from one to two campuses for nursing and other health-related programs. Valencia currently has four major campuses: three in Orange County and one in Osceola County. Valencia's Osceola Campus, the primary location for PIN, is a Federally designated Hispanic Serving Institution. This enables students from the partner high schools to remain in their communities after becoming registered nurses (RNs) so as to provide culturally competent care to diverse individuals in previously underserved areas. The nursing program has increased from two to three admissions per year to meet growth needs. The Valencia Nursing Program is very proud of its success rate, clearly demonstrated by an average 92-94 percent pass rate on the NCLEX. The State of Florida has a mean pass rate of 78 percent.

The PIN grant was designed to increase recruitment and retention of disadvantaged minority nursing students, particularly those who are Hispanic, by providing pre-entry preparation and retention activities for high school and college students who have the potential and desire to become RNs. Valencia's Associate Degree in Nursing (ADN) program provides an opportunity to become an RN for many minority and low-income students including first-time-in-college students who cannot afford to attend or cannot meet the entrance requirements of a four-year university. Valencia and the PIN grant assesses each student's academic level and provides remediation where required. Valencia encourages its ADN students to further their nursing education by earning a Baccalaureate or Bachelor of Science in Nursing (BSN), an RN to Master of Science in Nursing (MSN), or BSN to MSN to Doctorate of Nursing (PhD).

In Healthy People 2010, focus area 1-8 states that the proportions of all health professional degrees, including nursing, awarded to members of underrepresented racial and ethnic groups, must be increased. Baseline data showed that in 1995-96, only 3.4 percent of individuals in the skilled health professions were of Hispanic origin. Healthy People 2010's goal is to increase this to 12 percent. The PIN grant, through pre-entry and retention activities and by targeting diverse, disadvantaged high schools with a high Hispanic population, has already exceeded this goal. As the end of the third and final year of the grant, there has consistently been retention of over 50 percent Hispanic students, 15-

18 percent Asian students, 11-15 percent African American students and 11-15 percent disadvantaged Caucasian students. All of this growth is essential to meet the increasing needs of the Orange and Osceola counties in the service area of central Florida which, at 54 percent growth and 102 percent growth respectively, far surpass the state growth projection of 37 percent over the next 10 years (Figure 1). At the onset of the grant, the Hispanic population was underrepresented in Valencia's nursing program as it was, and still is, nationally. This grant has increased the numbers of ethnically diverse, disadvantaged students at Valencia in Central Florida and has provided one possible solution for the nursing shortage locally, statewide, and nationally.

Figure 1: Central Florida's Population Growth

Florida County	Population in 2000	Projected for 2015	Growth 2000-2015
Lake	210, 528	342,622	63 percent
Orange	896,344	1,376,275	54 percent
Osceola	172,493	348,490	102 percent
Seminole	365,196	521,225	43 percent
Sumter	53,345	117,409	120 percent
5-County Total	1,697,906	2,706,021	59 percent
Florida Total	15,982,378	21,828,683	37 percent

Pathways Into Nursing: Notable Awards and Accomplishments

Pathways Into Nursing (PIN) is a national award-winning program with nationally recognized staff because of development and successes over the past three years. The following awards have been given in recognition of PIN:

- Dr. Linda Speranza, Director of Pathways Into Nursing, was awarded the Bureau of Health Professions (BHPr) Associate Administrator's Achievement Award in the category of "Supporting Basic Nurse Education." This prestigious award recognizes grantees who have demonstrated outstanding skill and innovation in promoting and strengthening our Nation's health professions' workforce. This honor will be bestowed at the Bureau of Health Professions First All-Grantee Conference held in Washington, DC in June 2005.

- Diane Reed, PhD(c), Retention Specialist for Pathways Into Nursing, was a Grant Reviewer for the Health Resources and Services Administration (HRSA) for the Nursing Workforce Diversity Grant Program in 2005.

- Dr. Linda Speranza, Director of Pathways Into Nursing, was selected as a Finalist in the "Teaching" category for Nursing Spectrum's Nursing Excellence Awards.

- Diane Reed, PhD(c), Retention Specialist, was interviewed as an expert in career planning on "Real Life 101," a nationally syndicated television show for teenagers and their families, in February 2004.

- Destinations 2004: Communities of Practice Award 2004 was awarded to Dr. Linda Speranza, Director of Pathways Into Nursing, and Diane Reed, PhD(c), Retention Specialist for Pathways Into Nursing. It was a critical thinking model that evolved into an action research project featuring Pathways Into Nursing, Summer 2004.

- "Pathways Into Nursing" video clip aired on Channel 13 Central Florida News on July 6, 2004, highlighting the Pathways Into Nursing Summer Externship Health Exploration (SEHE) at Florida Hospital Celebration Health.

- Diane Reed, PhD(c), Retention Specialist, was selected for the 2005 National Institute for Staff and Organization Development (NISOD) Excellence in Learning Leadership Award for her design and implementation of the Summer Externship Health Exploration (SEHE) course.

- Diane Reed, PhD(c), Retention Specialist, was spotlighted in the Capella University Newsletter in October, 2003. Ms. Reed will complete the PhD at Capella in July 2005.

- National Institute for Staff and Organizational Development (NISOD) Excellence in Learning Leadership Award for "Pathways Into Nursing," May 2003.

- Awarded as one of the "Best Practices" for the State of Florida, entitled "Partners for a Healthy Community," Contemporary Hotel, Disney World, May 2004.

Publications and Internet Articles Recognizing Pathways Into Nursing

- Speranza, L. (2004). Pathways Into Nursing. *The Liaison, Newsletter for Middle and High School Counselors*. Valencia Community College, January 2004.

- Cited in "Growing Our Own," about the Pathways Into Nursing program compared to three other national programs, *Minority Nurse Magazine*, Fall 2004.

- Cited in "Innovative Program Introduces High School Students to Nursing," web site article about the Summer Externship Health Exploration program at Celebration Health, NurseZone.com, August 2, 2004.

- Pathways Into Nursing as part of Partners for a Healthy Community Awarded "Best Practices" for the State of Florida at the Contemporary Hotel, Disney World, June 2004.

Pathways Into Nursing Presentations at Local, National and International Conferences

- "Pathways Into Nursing: Accomplishments Along the Way," Presentation at the 112th Meeting of the National Advisory Council on Nursing Education and Practice (NACNEP), Rockville, Maryland, April 7-8, 2005.

- "Preparing Nurse Leaders for Diversity in Health Care," Presentation at the 2005 National Conference on Leadership Diversity, Orlando, Florida, March 17-19, 2005.

- "Structured College Placement Test (CPT) Tutoring for Diverse Pre-Nursing Students," Presentation at the National Coalition of Ethnic Minority Nurse Associations (NCEMNA), Washington DC, March 10-13, 2005.

- "Innovative Program Introduces High School Students to Nursing" about the Pathways Into Nursing Summer Externship Health Exploration program at Celebration Health, NurseZone.com, August 2, 2004.

- Presented a 4-part active learning segment to the Pathways Into Nursing students participating at the Summer Externship Health Exploration at Florida Hospital Celebration Health based on the book, "Who Moved My Cheese...for Teens," which focused on communication, team-building, and cultural diversity, June-July 2004.

- American Nurses Association (ANA), Minneapolis, Minnesota, poster entitled, "Student Recruitment and Retention: Priming and Preserving the Pipeline," June 25-29, 2004.

- American Educational Research Association (AERA), San Diego, California, poster entitled, "Comparison of Hispanic High School Students to Other Ethnically Diverse Populations in Health Care Motivational Components," April 13, 2004.

- National Organization of Associate Degree Nursing (NOADN), Phoenix, Arizona, focus session entitled, "Pathways Into Nursing: Using the Student Nurse Organization to Bridge the Gap Between High School and College," March 25, 2004.

- Central Florida Health Educators, Sanford, Florida, presentation entitled, "The Nursing Shortage…and One Possible Solution," March 12, 2004.

- Presented "The Nursing Shortage: Pathways Into Nursing" at the Rotary Club of Orlando, Florida, December 2003.

- Presented "How to Get HRSA Grants: Attacking the RFP and Increasing Your Chances of Success," National Organization for Associate Degree Nursing 2003 Annual Convention, Tampa, Florida, November 2003.

- Presented a 4-part active learning segment to the Pathways Into Nursing students participating at the Summer Externship Health Exploration at Osceola Regional Medical Center based on the book, "Who Moved My Cheese...for Teens," which focused on communication, team-building, and cultural diversity, June-July 2003.

- Presented "Pathways and Pitfalls" at the Associate Degree Educator Conference, Phoenix, Arizona, April 2003.

- "Health care: Self-efficacy, Emotion, and Task Value in High School Health Occupations Students," at the Southern Nursing Research Society Conference, Orlando, Florida, February 2003.

- Presented "Pathways Into Nursing: Success for Diverse Students" Consultation Presentation to the University of the Virgin Islands, St. Croix, May 12-14, 2005.

- Presented "Maneuvering the Maze of the First Year of College," National Institute for Staff and Organizational Development (NISOD), Austin, Texas, May 29-June 1, 2005.

- Presented "Pathways Into Nursing: Three Successful Years," Health Resources and Services Administration (HRSA) Grantee Meeting, Washington, DC, June 1-3, 2005.

- Presented "Pathways Into Nursing: Innovative Pre-Nursing Career Planning for Disadvantaged High School Students," National Career Development Association Global Conference, Orlando, Florida, June 22-25, 2005.

- Presented "Innovative Recruitment and Retention Strategies: Cultivating Hispanic and Other Disadvantaged Pre-Nursing High School Students" at the National Association of Hispanic Nurses (NAHN) 30th Annual Meeting and Conference, Cultural Competence: A Journey to Improving Health Care for Hispanics, Orlando, Florida, July 20, 2005.

- Presented "Maneuvering Through the Maze of the First Year of the Pre-nursing Curriculum," the National League for Nursing, Baltimore, Maryland, October 1, 2005.

Partnerships: Community Resources and Valencia Community College Programs

- The grant partners consist of Valencia and three high schools in the college's service area. A benefit of the partnership is automatic entrance into Valencia's Nursing Program once all of the prerequisite courses are completed according to nursing program specifications. The first high school, Cypress Creek High School (CCHS) located in Orange County, has a majority non-affluent Hispanic population. In the first year of the grant, there were over 5,000 students at CCHS. In the second year, that high school's enrollment dropped to slightly over 3,200 students, and that figure remains stable today. The initial size of CCHS warranted a new school to serve the needs of the community. Therefore, a new high school was built and zoned for approximately one half of the CCHS student population. PIN students at CCHS were given the choice to migrate to the new school without the PIN program or stay with PIN at CCHS. The decision by some students to move to the new high school, which is not part of the PIN high school partnership, resulted in the major reason for attrition the after the first year of the grant.

- The remaining two partners, Gateway High School (GHS) and Osceola High School (OHS) are located in Osceola County. GHS students come from a large, non-affluent diverse population comprised of predominantly Hispanic ethnicity. OHS students are non-affluent and diverse with a variety of ethnic groups, especially Hispanic.

- Partnerships were also formed with local hospitals in the high school's service area. Osceola Regional Medical Center and Celebration Health in the Florida Hospital Adventist Health Care System were motivated to work with PIN so as to provide the "staff of tomorrow." These hospitals wanted to give opportunities to PIN students because they recognized the benefit of providing positive experiences that would encourage them to come back to work in their own communities as RNs.

- College programs also formed partnerships with the PIN program to assist the students with the post-secondary transition. The following college programs have served key roles in facilitating the transition from high school to college for the PIN students:
  - Students In Industry;
  - Internship and Placement;
  - Recruitment and Retention of Ethnically Diverse Students;
  - Valencia Community College Nursing Program;
  - Creative Design Studios;
  - TECH Prep;
  - Dual Enrollment (DE);
  - Admissions;
  - Assessment Testing;
  - Career Services; and
  - Financial Aid.

Some of the enrichment programs and products developed in conjunction with the above listed programs include:

- Field trips to partnership hospitals and Valencia Community College for career investigations;

- Summer Externship Health Exploration (SEHE);

- Bridges-To-Success Scholarships;

- PIN Pals Mentorship Program;

- PIN "pinning" ceremony;

- Brochures, Posters, Certificates, Graphics, and PIN logos;

- Development of Medical Academy at OHS and CCHS;

- Utilization of SimMan, computerized health care mannequin, with the Nursing Arts Lab at Valencia Community College's Osceola Campus;

- Effective utilization of Dual Enrollment (DE) to provide cost effective education en route to the RN degree;

- Use of Waiver for Valencia Community College admission fee for DE students;

- Assistance with completion of mandatory college applications;

- Career resources for Nursing and personality testing; and

- Scholarships provided for qualified PIN students through Bridges, Health Resources and Services Administration, and private organizations.

High School Data

Applicants

The applicants are ethnically diverse Hispanic, Asian, African-American, and disadvantaged Caucasian students in grades 10-12. It was originally thought that the grant would educate 60 students over the three year period. The grant specified that 15 students would be admitted to the PIN project in the first year; 20 would be admitted in the second year; and 25 would be educated the third year. Over the three years of the grant, Valencia has facilitated the PIN experience for 130 students from the three high schools.

Selection Criteria

Although the high schools believed that the majority of the students would have grade point averages (GPAs) of 2.0 to 2.9, a large portion of the applicants for Pathways Into Nursing had achieved GPAs over 3.0. Other criteria included a PIN application packet with a variety of admission requirements including the College Placement Test (CPT).

College Placement Test (CPT)

The College Placement Test (CPT), developed by The College Board, assesses levels of skill accomplishment in reading, English, and mathematics. Passing scores on the CPT permit high school students to take college courses while attending high school (via dual enrollment [DE]). CPT scores from the entering and graduating PIN students were utilized to demonstrate research-based outcomes. Research targeted these ethnically diverse and disadvantaged pre-nursing high school students to decrease their need for college remediation courses. PIN prepares and retains pre-nursing students by utilizing CPT test scores as an indicator for dual enrollment eligibility. Substandard CPT scores warrant remediation, delaying college entrance. The goal was to be successful in passing the CPT therefore providing the foundation skills to pursue various career options as a registered nurse.

PIN students completed the CPT and were enrolled in health science courses in grades 10-12 in the three partnership high schools. Scores of 90 in English, 84 in reading, and 84 in mathematics were required in order to avoid remedial courses in college. Ninety-three students were given structured CPT tutoring for a duration of one semester to two years. The CPT was retaken to see if students qualified for dual enrollment prior to becoming college freshmen. A mean was obtained of English, reading, and mathematics scores upon entrance, and again after tutoring.

The results for the 93 entering PIN students were as follows: The average CPT score for English was 79, reading was 69 and mathematics was 53. After tutoring, the average score for English increased to 90, reading increased to 81 and mathematics increased to 71. This reflects a notable increase in mean student CPT scores and therefore a reduction in the need for remediation courses prior to dual enrollment and/or courses taken as a college student.

Demographics

Ethnicity

The ethnicity of the current PIN student population is as follows:

- Hispanic: 50 percent

- Asian: 18 percent

- Disadvantaged Caucasian: 17 percent

- African-American: 14 percent

All of the PIN partnership high schools are considered "disadvantaged."

Gender

Currently, there are a total of six male students in the PIN program.

High School Distribution

Currently, the distribution for the PIN program is differentiated between high school, pre-nursing at Valencia Community College, and the Valencia Nursing Program. There are a total of 103 PIN students in the entire PIN program with 71 of these students in high school, 28 in pre-nursing courses at Valencia, and four in the Valencia Nursing Program. The Valencia pre-nursing and nursing students are referred to as the "VCC/PIN." The PIN students are progressing so that there is an increase in admissions into the Nursing Program every semester. For example, there were two PIN student admissions into the Nursing Program in fall 2004. In spring 2005 there were also two PIN student admissions. However, as more students complete prerequisite courses through dual enrollment while in high school, they have shortened the time for entrance into the Valencia Nursing Program. As a result, there were seven VCC/PIN students entering the Valencia Nursing Program in fall 2005.

Pathways Design

Core Team

The PIN Core Team is diverse and consists of the Director, Retention Specialist, three high school Educators, and a grant staff assistant. The Core Team's ethnic background includes two Hispanic, one African-American and three Caucasian individuals. The Director and Retention Specialist have worked in full-time capacities during the three years of the grant. The grant staff assistant was employed in a 20- to 32-hour position until the past six months in which she was employed full time to

meet the increasing demands of the grant. The PIN Educators have been employed as part-time staff (20 hour per week) and spend a major portion of their time in the three partnership high schools. Although all are cross-trained, each has been given specific responsibilities: Parent Coordinator; Enrichment and Web Site Development Coordinator; and Incentive, Fundraiser, and Team Leader Coordinator.

Diversity

The learning needs of the students, staff, and the community, including diversity, have been part of this grant. One objective of the grant has been to achieve a culturally competent and sensitive nursing workforce through bi-annual college and high school faculty and staff training. Activities included conducting "Diversity Works!" and other cultural diversity workshops twice a year for grant staff. Other activities included cultural exchange luncheons, endorsement of community events sensitive to the needs of diverse ethnic groups, and linkages to national ethnically diverse holidays such as Black History Month and Hispanic Awareness Month. All activities serve to enhance the richness of diversity through shared experiences with staff, students, and the community.

Mentoring

Student mentoring was conducted at three different levels. The first mentoring level consisted of one-to-one mentoring for each of the PIN students by the educator at their high school. At the second level, the "Course Progression (CP)" form was developed to assist with mentoring the transitioning PIN high school students into Valencia. The CP provided the Retention Specialist and the VCC/PIN students with a quick reference for knowing the exact status in relation to grades, degree completion status, and courses taken. Once students graduated from high school and attended pre-nursing courses at Valencia, mentoring continued by the Retention Specialist. The third level consisted of students who entered the nursing program. At this level, mentoring was enhanced by the Florida Student Nurse Association (FNSA) and the National Student Nurse Association (NSNA) award-winning "PIN Pals Mentorship Program."

PIN Core Team mentoring was also done throughout the three years of the grant. This included: enhancing computer skills, web design, design of new courses and revision of existing courses, formulating and executing personal development plans, expanding global understanding of cultural sensitivity and diversity, personal growth related to teaching skills, and development of community resources for future employment opportunities.

Tutoring

Tutors were budgeted for Year 2 of the grant which improved the outcomes of the previously discussed CPT scores. Tutors were also used to assist high school students with improving grades in all academic areas. An unexpected positive outcome was that eventually VCC/PIN students became tutors for high school PIN students.

Open Houses

Open Houses were conducted annually prior to the beginning of the high school year. Announced in both Spanish and English local newspapers, Open Houses invited prospective students and their families to each of the partnership high schools. Parents were receptive to the invitation to learn more about the RN program at Valencia. Many parents queried about becoming an RN themselves, as a career change. The PIN staff bilingually assisted the students as well as the parents in career information. As a result of this close relationship with parents, one mother with an Associate Degree in Nursing (ADN), has recently completed her Bachelor of Science in Nursing and enrolled in a Master

of Science in Nursing (MSN) program. She plans to graduate with her MSN at the same time her daughter, in the PIN program, will complete her ADN at Valencia. The PIN turnout at some high schools was more than 100 parents and students which greatly outnumbered the number of attendees to a general open house for the *entire* high school held another evening.

Pathways Into Nursing Accomplishments

The following PIN accomplishments have been recognized throughout the past three years:

- **PIN Pals Mentorship Program** – Current PIN Nursing students are PIN Pals for the fall 2005 PIN students entering the Nursing Program.

- **High School Medical Academies** – One high school started with a health academy and the PIN grant helped to develop academies in the other two partnership high schools.

- **Measurable College Placement Test (CPT) Outcomes** – PIN students took fewer remedial courses than the typical community college student because of tutoring.

- **Bridges and $40K HRSA Scholarships** – The majority of graduating PIN students were awarded Bridges Scholarships (Valencia Community College two-year scholarship). In addition, HRSA awarded $40K for qualified PIN students for Valencia Community College courses.

- **Summer Externship Health Exploration** – This program provided life experiences critical to the PIN student's choice of becoming a registered nurse.

National Award Winning Program: Summer Externship Health Exploration (SEHE)

PIN students were allowed to shadow RNs in numerous departments within both Osceola Regional Medical Center and Florida Hospital Celebration Health Hospital. SEHE was a summer dual enrollment (DE) course that lasted one month. In addition to the rotations in various hospital departments, leadership activities augmented student professional development. The students were enriched by guest presenters. This innovative month-long DE course provided a sense of reality about nursing which encouraged students to work harder toward becoming successful registered nurses.

Challenges throughout the Past Three Years

Several challenges surfaced during the three year PIN grant:

- **Cultural** – There were citizenship issues related to students submitting proper credentials for college admission.

- **Partnerships** – High school administration had to be informed or enlightened about current quality educational retention paradigms that were innovative as well as goal-directed.

- **Unexpected** – Findings were consistent with overall national high school concerns related to students transitioning from secondary and post-secondary education.

Lessons Learned Through the Pathways Into Nursing Grant

Lessons learned through the PIN grant program included:

- PIN students have excelled in improving CPT scores, reducing the need for college remediation courses.

- Valencia nursing students have bridged the gap through mentoring as PIN Pals.

- Nursing scholarships have allowed students to concentrate on grades, thus maintaining high GPAs.

- Parents have moved to the zoned school district so that their students could have the opportunity to apply and be a part of the PIN program.

- Legislation is needed that will increase funding to nursing programs.

- Nursing scholarships and summer externships must continue.

- Innovative paradigms should be adopted to educate nurses who will meet the increasing health care needs of the expanding population.

Summary

- PIN *more than met* the goals established in the grant proposal.

- PIN is a wonderfully innovative teamwork paradigm that should be recognized to bridge the levels of nursing, providing the individual with the necessary tools to climb the "career pathway."

- The PIN Program provides one possible solution for the nursing shortage by supporting the creation of culturally sensitive and culturally competent health care to diverse individuals from members of their own communities.

3.4. Success Pathways: Introducing Nursing as a Career Option

Dr. DeLois P. Weekes

Summary

Dr. Weekes (a new NACNEP appointee who began work on the National Advisory Council on Nurse Education and Practice (NACNEP) in November 2005) described Springfield, Missouri as in the Southwest corner of the State, in the Ozarks. It has a typical Ozark culture: 300,000 people, five educational institutions, and two major regional medical centers. There is a general North-South divide of race and income in the school system; the schools that the Success Pathways Into Nursing (SPIN) program partners with are in the North. The program initially started working in elementary, middle, and high schools. There was an initial outcry from families of Caucasian students asking why their children were not getting the same resources as the students of color. The program responded by trying to make the program co-curricular rather than extracurricular. The partnering high school agreed to co-curricular status, but the middle school did not.

The Cox Nursing Encounter Camps (C-NEC) were held for two weeks each summer of the project. The curriculum included shadowing registered nurses, learning basic nursing skills, mathematics, science, reading, critical thinking and self-efficacy activities, developing self-confidence, and team building. The Retention Mentoring Program (RMP) also assigned faculty mentors to each participant upon admission to Cox College and monitored participants through the first writing of their registered nurse (RN) licensure examination by the faculty mentors. Extensive efforts were carried out seeking community support for the project.

Among the challenges were finding nurses of color to be project staff, re-orienting staff each year, timing session meetings, dealing with school officials and politicians, recruiting appropriate consultants, and overcoming parental wariness. Future plans include quarterly newsletters, college workshops, continued C-NECs, and a project conference in August 2005.

Presentation

Success Pathways: Introducing Nursing as a Career Option

The purpose of this presentation is to describe an ongoing Federally funded project entitled "Success Pathways Into Nursing (SPIN) Project." This project was designed to recruit and retain underrepresented minorities (URM) into nursing. The project focused on elementary, middle, and high school students as well as URM students who are currently enrolled in Associate or Bachelor of Science Programs in Nursing. A variety of methods were used to engage and interest the youth including educational sessions, college workshops, tutoring, mentoring, receptions, summer camps, camp alumni dinners, and field trips to the College for hands-on experiences that enable youth to learn basic nursing skills.

A variety of data were collected and used to assess the effectiveness of specific strategies/activities and the project as a whole. A major portion of this presentation concerned the challenges faced and lessons learned in the process of implementing this project. Specific suggestions for anticipating and managing obstacles and capitalizing on opportunities were discussed. Dialogue included implementation of the registered nurse (RN) Workforce Diversity Project in environments that encompass small numbers of minorities in their populations. The objectives of the presentation were to:

- Describe the Success Pathways Into Nursing (SPIN) Project;

- Identify the challenges faced and the lessons learned in implementing a project directed at recruitment and retention of underrepresented minorities (URM) into nursing in a city and college that is predominantly European American; and

- Discuss the future plans and activities of the SPIN Project.

Success Pathways: Introducing Nursing as a Career Option

Dr. DeLois P. Weekes

Introduction

The Success Pathways Into Nursing (SPIN) Project was a three-year grant (July 1, 2002 through July 1, 2005) funded by the U.S. Department of Health and Human Services, Bureau of Health Professions, Division of Nursing. The purpose of the SPIN Project was to contribute to increasing the number of registered nurses from underrepresented minority (URM) groups available to deliver culturally competent healthcare to an increasingly diverse population.

The SPIN Project was implemented as an extra-curricular activity targeted at all URM students at Central High School (grades 9-12) and Parkview High School (grades 9-12). At Pipkin Middle School (grades 6-8) and Boyd Elementary School (5th grade), the project was implemented as a co-curricular activity. These schools, located in North Springfield, had the highest percentage of the URM secondary school student population in the Springfield community and were located in the only Medically Underserved Area (MUA) in Greene County, adjacent to Cox College.

Other program components associated with the SPIN project were the Retention Mentoring Program (RMP), Cultural Competence Week, and the Cox Nursing Encounter Camp (C-NEC). The Retention Mentoring component was developed for Cox College URM students in order to facilitate their academic success by offering workshops, scholarships, and mentors. Cultural Competence Week was held annually in February. During the students' visit, workshops, seminars, colloquiums, and luncheons were held. These were planned in consultation with the program director, program staff, and members of the Cox College faculty and staff. These forums served as venues for discussion of historic and contemporary issues in cultural competence and cultural inclusion, and were open to all internal and external constituents of Cox College. In addition, a nationally known cultural competence expert served as a visiting professor on the campus of Cox College and helped to develop and implement the workshops

The Cox Nursing Encounter Camp was a two-week camp held in 2001-2003 for high school students from URM backgrounds residing in Greene County. The first week of the camp was held at the YMCA's Camp Wakonda where participants learned critical thinking skills, teamwork skills, and social skills. During the second week participants shadowed registered nurses at Cox South Medical Center.

The goals of the SPIN Project focused on exposure of the target population to health care careers, specifically nursing. This was achieved through the use of modalities such as videos and interactive, hands-on weekly meetings. Participant knowledge of and interest in nursing was assessed using a pre-test, the Nursing Knowledge Interest Survey (NKIS), administered to project participants during the first meeting. The NKIS was also used as a post-test to track changes in knowledge and interest in nursing after the informational and hands-on sessions and videos.

The most significant challenge to the accomplishment of the project goals and objectives occurred in Year 3. After a careful assessment of the support required at the middle school to assure achievement of the project objectives, it was determined that changing the middle school participant was necessary. For the first two years of the project (2002 – 2004), Pipkin Middle School only allowed the SPIN project as an extra-curricular activity, and not during instructional time. This was a barrier to achievement of project goals. After multiple meetings with the Principal of Pipkin Middle School, it

became clear that the school's administration was not going to relent. Therefore, an alternative school, Parkview High School, was added, with a prior agreement that sessions would be during instructional time. Despite the inevitable disruption accompanying such a change, project staff were able to build the relationships and the support at the new project school necessary to enable implementation of the project and achievement of the project activities, a tribute to the expertise and professionalism of the project staff.

Conducting meetings during instructional hours versus after school resulted in increased numbers of participants at Central High School where senior graduating students were likely to matriculate into Cox College and the Retention Mentoring Program. Another reason Parkview High School was added was to reach out to increased numbers of high school juniors and seniors with an interest in nursing who might become prospective students for Cox College Nursing Programs.

Throughout the SPIN Project there were many activities, seminars, and sessions held to reach the objectives and goals. This final report is a summary of the accomplishments, obstacles, and events comprising the SPIN Project.

Objective 1: Contribute to the elimination of health disparities among segments of the population through development of a pipeline of ethnically/racially diverse elementary, middle, and high school students who will become prospective applicants to Associate of Science/Bachelor of Science nursing programs**.**

Accomplishments Related to Objective 1:

Annually, public schools in Springfield begin in August which necessitated pushing SPIN sessions back to a September start date versus the August date initially identified for start-up. The September start-up afforded teachers and students time to settle into the new school year. In accordance with the sub-objectives, eight sessions were held twice per month and lasted 45 to 60 minutes.

Sessions were held during instructional time at Boyd Elementary, which is multi-ethnic/racial, enabling the entire fifth grade class to participate in activities and be exposed to nursing. The concession to include the entire class was made to mitigate acrimony and alienation of school officials and parents.

The SPIN sessions exposed participants to information about nursing through interactive sessions, videos, and hands-on activities. During Year One, three hands-on sessions were held in the Cox College Skills Laboratory. Under the direct supervision of Cox College faculty and SPIN Faculty Mentors, participants learned psychomotor skills such as how to take apical and radial pulses and blood pressure; they also participated in a mobility lab.

Each project year, attendance at all schools was within the targets set for the project **(see Figure 1)**. Participants demonstrated high levels of engagement and participation in session activities. The highlight of the project for all participants continued to be the field trips to the Cox College Skills Laboratory to learn basic nursing skills.

Figure 1: Number of Participants in the SPIN Project

	Year 1	Year 2	Year 3
Boyd Elementary	43	34	21
Pipkin Middle School	16	11	---
Central High School	20	44	59
Parkview High School	---	---	17

Factors Contributing to Performance and Achievement of Objective 1:

Student exposure to role models. This exposure was accomplished in three ways: project staff; informational videos; and registered nurse (RN) mentors who were also URMs. These positive role models ranged from the President of Cox College to nursing students to support staff.

- **Selected SPIN Project experiences**. The Cox College Skills Lab was utilized for both Pipkin Middle School and Central High School SPIN Project participants. This experience enabled participants to learn basic psychomotor (i.e., blood pressure, pulse, respiration, apical pulse, and crutch walking) skills. Participants were taught basic computer skills in the college computer lab. Through the hands-on activities, the students gained increased knowledge and understanding of what nurses do, in a "cool" way. An added benefit was the opportunity for participants to meet and interact with current nursing students in a college setting. Project participants looked forward to participating in this popular activity

- **Summer camp experience**. This was a tuition-free, two-week summer experience with an overarching objective to promote teamwork and critical thinking, and improve mathematics, science, and reading skills. The first week was a "fun" experience during which the high school students stayed overnight at a local summer camp. The second week allowed the participants to shadow registered nurses in the clinical setting. The summer camp was a recruitment and retention tool for the Senior High SPIN Project at Springfield Central which saw a 44 percent retention rate from Year One to Year Two.

Barriers to Achievement of Objective 1:

- **Time, space, and schedule at Pipkin Middle School**. The educationally focused Junior High SPIN Project competed for students' time with popular extra-curricular activities (e.g., basketball, track, and cheerleading). As a result, conversations were held with the Pipkin administration in an attempt to change the Junior High SPIN Club to a co-curricular activity imbedded into the instructional day and to acquire dedicated meeting space. They were not receptive to the requested changes in spite of the financial stipends from Cox College and the support from the Springfield School District Central Office. The decline in participation of the Junior High SPIN Club was directly related to the lack of administrative support at the middle school that would enable the Junior High SPIN Club to function as a co-curricular activity.

- **Loss of Federal financial support.** Cox College was not selected to receive additional funding beyond the current grant time frame. The organization, at this time, is in the planning stages for sustaining the SPIN Project without Federal funding. Conversations have been held with Central High School Counselors to determine the feasibility of continuance of the field trips to the Cox College Nursing Resource Center Skills Laboratory.

- **Time and schedule at Central High School**. In Year One, Senior High SPIN Club meetings began at 7:30 am, which seriously limited participation. As a result, conversations were held

with the principal and guidance counselors and it was agreed to move the meeting into the instructional day. As a result of this change, participation increased by 50 percent in Year Two.

Objective 2: Development and implementation of a Retention/Mentoring Program (RMP) for pre-matriculated (pre-nursing) and matriculated Cox College students.

Accomplishments Related to Objective 2:

The Retention/Mentoring Program (RMP) was designed for pre-nursing and nursing students enrolled at Cox College. The purpose of the meetings was to introduce the Retention Mentoring Program and identify interested URM students admitted to the college and enrolled in general education classes as well as students admitted to the Associate of Science in Nursing (ASN) and Bachelor of Science in Nursing (BSN) Programs. Sessions with the RMP participants were held monthly. The largest attendance each year occurred during the "Final Finale Study Session" where tutors and staff were available to assist students with preparation and study for final examinations. Marketing techniques for recruitment and retention into the RMP were developed in anticipation of capturing a larger audience and increasing participation. The number of underrepresented minorities enrolled at Cox College increased from three (fall 2002, beginning of SPIN) to 21 (spring 2005, near the end of SPIN), with 7 of them in the BSN program and 14 in the ASN program. Another advertising tactic for RMP and the SPIN Project was that the counselors were Cox College students who had declared nursing as their major.

In addition, the SPIN Project Coordinator worked closely with faculty teaching the Promoting Learning and Ultimate Success (PLUS) course. As a result, initial contact with students of color occurred during their first semester on campus which facilitated recruitment into the RMP Program. The PLUS course was required for all first time Cox College students and was designed to facilitate a successful college experience by offering strategies to improve and build strong classroom skills, study techniques, test taking, critical thinking, and time management skills. Introduction of the RMP during this class ensured that every URM had information on RMP.

The evaluation data for this objective demonstrated the effectiveness of project activities in building and maintaining interest in nursing as a profession for URM. The finite number of participants was small which appears to be an artifact of two factors. First, the Springfield community is approximately 95 percent Caucasian. Thus, the potential pool of URM secondary school students was small. Second, the term of the project was sufficient to provide a firm foundation for increasing URM participation in nursing but not sufficient to allow the time to move to the next level of integration and incorporation necessary to institutionalize the project in the secondary schools. So, the number of URM students now entering the College must be understood in its historical and demographic contexts and appreciated not for its size but for its clear indication of project success.

Reports from URM members of the Cox College Community Advisory Council helped to provide additional understanding in a historical context. Specifically, the URM members of the Community Advisory Council further indicates that SPIN has had a significant impact on the Springfield community in the following ways:

- The project opened a vista for URM students to consider nursing as a career option, an option they never previously considered possible;
- Cox College is now perceived as a place that welcomes and encourages students from URM groups to pursue health careers, especially nursing; and

- Greater numbers of community members now understand that Cox College makes available academic and financial support services that enable students from URM groups to pursue college degrees and careers in health care.

Factors Contributing to Performance and Achievement of Objective 2:

- **Overcoming the history of Cox College admissions**. From the establishment of Burge School of Nursing in 1907 (which became Cox College in 1995) until 2001, there were only 10 graduates from URM backgrounds.

- **High visibility of the current President of Cox College**. Dr. Weekes has provided the vision, leadership, and administrative support to facilitate the success of the SPIN Project. Her position in the community as a prominent African-American woman in a chief executive position has placed her in a unique and visible role. Dr. Weekes has been the driving force behind the creation of the SPIN Project consistent with the vision for the future of Cox College.

- **Recruitment and retention of students from URM backgrounds at Cox College**. The faculty and administration acknowledged the need to increase the number of students from URM backgrounds in nursing programs at Cox College in Springfield. The creation of an academic and community environment at Cox College has facilitated retention of students from URM backgrounds. The faculty and administration have integrated the Johnson & Johnson technical assistance and advice from other experts into the milieu of the academic institution. Other strategies implemented include provision of diversity publications in the college library, a new emphasis on URM students in marketing tools, and the utilization of on-site publicity materials (billboards, presentations). All strategies have a priority focus to attract students from URM groups to Cox College.

- **Community-based activities**. Cox College has made a concerted effort to maintain visibility within the URM communities. Members of the college community participated in activities such as: middle and high school functions (including graduations); National Association for the Advancement of Colored People meetings; faith-based presentations; speaker activities at community events; volunteering at homeless shelters; a Juneteenth celebration; and Missouri Black Caucus health care education activities. These combined efforts have clearly demonstrated the interface of the college with the community. Through these aggressive marketing efforts, Cox College has been able to recruit new students from URM backgrounds who otherwise may not have been reached.

Barriers to Achievement of Objective 2:

- **Overcome the history of Cox College**. Faculty and administration have worked hard to overcome the image of Cox College as a "white" school with walls impermeable to groups of color. The time and energy to change this image has been a point of focus for the current leadership. This impetus to change has had to come from the inside so that Cox College could be perceived as a welcoming environment for students from URM backgrounds. These efforts are ongoing as the College continues to strive to change the image of its past.

- **Demographics**. The URM population of the eight counties is 5.1 percent. This limits the opportunities to expand the pool of potential candidates without going outside the Greater Springfield area. Before 2001, Cox College did not advertise, market, or recruit outside of the commuting area. Since her arrival, Dr. Weekes has expanded the scope of the college's efforts to include urban, metropolitan areas in Missouri, and surrounding states.

- **Promotional materials**. Prior to 2001, Cox College materials did not depict any URM students in their marketing or promotional materials. This has changed but the older image lingers in the area's consciousness. Cox College has also begun to utilize updated marketing efforts (web-based, internet technologies) as part of primary outreach and recruitment efforts.

Objective 3: Incorporate cultural competence throughout curricula in nursing programs at Cox College and develop a cadre of culturally competent RMP faculty mentors, RN, SPIN Club, and C-NEC Mentors for the project.

Accomplishments Related to Objective 3:

Cultural Competence Week was held annually every February. The first Cultural Competence Expert (CCE), Dr. Joyce Newman Giger, spent a week on the Cox College campus during February 17–21, 2003. She conducted an eight-hour cultural competence workshop inclusive of interactive components to facilitate preparation of faculty and project personnel to work with racially/ethnically diverse students. Workshop invitees included Boyd Elementary School, Pipkin Middle School, and Central High School principals and counselors, Directors of Nursing, the Chief Nursing Officer and Vice President, and the Director of Recruitment and Retention for Nursing in the Cox Health System, among others. Participants took a pre- and post-workshop test on cultural competency. Participants also took a pre- and post-workshop test during the workshop to measure knowledge of cultural competence.

Dr. Marjorie Kagawa-Singer, the second Diversity Cultural Competence expert, spent a week on the Cox College campus during February 16–20, 2004. While on campus, she provided consultation regarding curriculum to the SPIN Project and to Cox College faculty, visited classrooms, and held a colloquium for Cox College students where she discussed specific nursing issues. While visiting Cox College, she presented workshops on issues about cultural competence and end of life which has been an interest of the Missouri Nurses Association (MONA) for the past two years. She also gave a presentation to the Mid-America Cancer Center.

Dr. Guadalupe Palos, the third Diversity Cultural Competence expert, spent February 21-25, 2005 at Cox College. She provided consultation and training in the areas of conflict resolution, team-building across racial/ethnic boundaries, consensus-building in a diverse environment for staff, faculty, RN Mentors, and students enrolled in Cox College. She also reviewed print/visual materials including the web site, to identify strengths and weakness related to cultural competence. She met with the curriculum team to discuss strategies to facilitate the integration of cultural competence into the overall nursing curriculum.
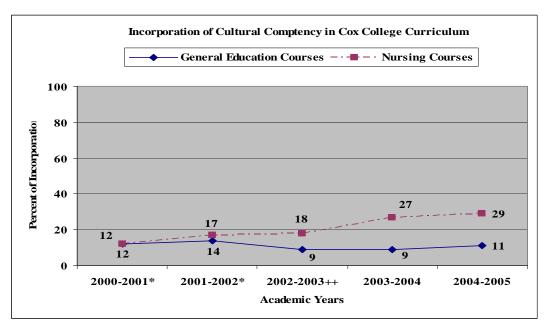
The interest in cultural competence has risen at Cox College in the past two years due to the SPIN Project, and the call for information has been overwhelming. Astute management of the project budget allowed for an additional visit by a consultant in cultural competence during Year 3. This allowed for additional student, faculty, and staff education and provided another resource to the Springfield community on culturally competent care.

Dr. Carla Serlin-King, the fourth and final cultural competency expert, visited Cox College during October 18-22, 2004. As well as being a visiting professor at Cox College, she presented cultural competence issues to the Missouri Nurses Association (MONA). During her visit she met with underrepresented minority students to address cultural issues at Cox College. She also gave a presentation at the Forest Institute of Professional Psychology entitled "Cultural Competence: Policy Perspectives Relevant to Contemporary Mental Health in a Multicultural Society."

Factors Contributing to Performance and Achievement of Objective 3:

- **The design of cultural competence week**. Visiting URM professors with expertise in the field of cultural and ethnic competency were invited to come to the Cox College campus for a week. The faculty integrated the visiting experts into the classroom where the focus was on achievement of specific course objectives related to cultural competence. The classroom experience was followed by the students' participation in community-wide workshops where the focus was on the broader concept of cultural competence as well as skill development. The ultimate impact has been the fostering of self-awareness and increasing the understanding of the need to include cultural competence in the curriculum by Cox College students.

- **Expanding the concept of cultural competency**. The conceptual understanding of culture and ethnicity has been broadened by the presence of visiting URM professors on campus to expand the definition beyond race and ethnicity. The members of the Cox College community believe that growth and cultural competence is an ongoing process rather than a single event. This emphasis on cultural competence in the curriculum and the college environment will be a sustained endeavor.

  Expansion of cultural competency has been accomplished through incorporation of cultural competency and cultural inclusion in the Cox College nursing curriculum. The number of courses that have integrated cultural competency increased between academic years 2000-2001 to 2004-2005. The chart below shows this increase.

Incorporation of Cultural Comptency in Cox College Curriculum

*RN-BSN track only
++BSN Entry-level track and BSN Accelerated track added

Because of the timing of revision of the general education curriculum, limited success has been achieved in attaining incorporation of cultural content into the General Education courses. However, considerable success was achieved with incorporation of cultural competency/inclusion components into the Nursing courses.

Overall Project Performance Analysis

After a joint analysis of the performance trend at Cox College, the project team identified the following key factors impacting performance:

- **The President's/Project Director's vision and the faculty support**. The President's vision and influence engendered the faculty support that lead to the strengthening of the curriculum. The integration of cultural competence into the curriculum is an ongoing process subject to periodic review.

- **Becoming more visible in the Cox College community**. Exposure to Cox College as a result of the SPIN Project has been very beneficial in getting more students enrolled in Cox College. The SPIN Project also put forward an image of diversity for Cox College in the community.

Overall Project Barriers

- **Emphasis placed on nursing course curriculum development**. As a result of the focus of the HRSA Nursing Workforce Diversity grant, the faculty determined that they would implement the cultural competence components into the nursing courses first. The broader, inclusive focus on curriculum change and the incorporation into the general education courses has not occurred at a rapid rate.

- **Curriculum change process**. The HRSA Nursing Workforce Diversity grant has served as a driving agent to curriculum change. The grant has made a great impact despite the slow, methodical curriculum change process.

Conclusion

The SPIN Project has made an inestimable contribution to the growth and development of Cox College, the maturation of the faculty and student body in terms of cultural competence, and the enrollment of students from URM backgrounds in the general education and nursing curricula. It is anticipated that the benefits will continue to accrue even in the absence of grant funding. However, it should be noted that investing in projects to increase the number of students from underrepresented minority backgrounds in nursing in geographic areas that have numerically small populations of these individuals may have an impact that exceeds those in areas with larger populations. The increase in visibility and acceptance afforded by projects such as SPIN in these areas provides a deeper and broader impact than that in other areas. Also of note is the capacity to have a positive impact on the self-concept and sense of self-worth of students from underrepresented minority groups for whom opportunities are much more proscribed in geographic areas that are predominantly populated by Caucasian individuals. The SPIN project has served the Springfield community in both of these ways and can only be characterized as an unquestionable *success*.